

Juba-Nimule Road - Phase 1 (100,000,000.000)

Southern Sudan

Section
Conditions of Particular Application

auditors appointed by the Client, if so required by the Client."

SUB-CLAUSE 26.3 - PERMITS AND RESPONSIBILITIES

Add the following Sub-Clause 26.3:

"The Contractor shall be responsible for obtaining any necessary licenses and permits, and for complying with any Southern Sudan, and municipal laws, codes, and regulations applicable to the performance of the work. The Contractor shall also be responsible for all materials delivered and work performed until completion and acceptance of the entire work, except for any completed unit of work which may have been accepted under the Contract."

SUB-CLAUSE 26.3.1 - PERMITS AND LICENSES FOR BLASTING OPERATIONS

Add the following Sub-Clause 26.3.1:

"The Contractor shall be responsible for obtaining such licenses and permits necessary for blasting operations including the importation and storage of explosives, which may be required by the Southern Sudan Ministry of Mines and Minerals and/or other country, local or regional government agencies having jurisdiction. Before the commencement of any blasting operations and/or importing of any explosives to the Site the Contractor shall provide the Engineer copies (with appropriate English translations) of all such licenses and permits."

SUB-CLAUSE 26.4 - HOST COUNTRY TAXES, DUTIES AND LEVIES

Add the following Sub-Clause 26.4:

"Neither the Contractor, nor Subcontractors at any tier shall pay any Host Country taxes, duties nor levies from which the USAID program (under which this contract is a part of) is exempt pursuant to the agreement between the United States and the Government of Southern Sudan.

The Contractor will immediately notify the Engineer if any such taxes duties or levies are assessed against the Contractor or its Subcontractors at any tier.

In the Event that any exempt charges are paid by the Contractor or its Subcontractors they will not be reimbursed by the Employer or the Client.

Fees charged by the Host Country for visas, travel permits and/or work permits are not included under this exemption. The Contractor and its Subcontractors shall be responsible for the cost of all visas, travel permits and/or work permits as may be required for their personnel to enter and/or work in the Host Country."

SUB-CLAUSE 26.4.1 - EXPORT OF EQUIPMENT, MATERIALS AND OTHER ITEMS

The exemption from Host Country taxes, duties and levies per Sub-Clause 26.4 is applicable only during the tenure of this Contract under the USAID program. Upon completion of the Contract or if the Contract is otherwise concluded, the Contractor shall export all their equipment, materials and other items imported into the Host Country that are not incorporated in the Works. All such equipment, materials and other items that are not exported from the Host Country, or are sold in the Host Country, may be subject to such Host Country taxes, duties and levies imposed by the Host Country.

The Contractor may, at its discretion and with the concurrence of the Host Country

Juba-Nimule Road - Package 1 (07000-55+000)
 Southern Sudan

Section 1
Conditions of Particular Application

authorities having jurisdiction, transfer exempted equipment, materials and other items imported per Sub-Clause 26.4 to another program having the same exemption. The Employer will be under no obligation to the Contractor for such transfer of equipment, materials and other items and can not guarantee the extension of the exemption provided under Sub-Clause 26.4.

Upon completion of the Contract or if the Contract is otherwise concluded the Contractor shall provide the Employer such documentation that the Employer may reasonably request as proof that equipment, materials and other items that have been imported into the Host Country under the provisions of Sub-Clause 26.4 and not incorporated in the Works, have been exported from the Host Country and/or, as approved by the Host Country authorities having jurisdiction, transferred to another program having the same exemption. The Employer may withhold payment of retention money pursuant to Sub-Clause 60.6 if the Contractor fails to provide documentation of export or proper transfer of said equipment, materials and other items imported into the Host Country."

SUB-CLAUSE 26.5 - DAMAGE TO EXISTING PROPERTY

Add the following Sub-Clause 26.5:

"The Contractor will be held responsible for any damage to existing structures, works, materials, or equipment because of his operations or the operations of any of its subcontractors. The Contractor shall repair or replace any damaged structures, works, materials, or equipment to the satisfaction of the Engineer, and at no additional cost to the Employer.

The Contractor shall be responsible for all damage to streets, roads, railroads, curbs, sidewalks, highways, shoulders, ditches, embankment, culverts, bridges, or other public or private property, which may be caused by the transport of equipment, materials or people to or from the Works."

SUB-CLAUSE 27.2 - CULTURAL AND HISTORIC ARTEFACTS

Add the following Sub-Clause 27.2:

"In the event of unanticipated discoveries of cultural or historic artifacts (movable or immovable) in the course of the work, the Contractor shall take all necessary measures to protect the findings and shall notify the Engineer and provincial-level representatives of the Archaeological Committee and the Ministry of Information and Culture. If continuation of the work would endanger the finding, project work shall be suspended until a solution for preservation of the artifacts is agreed upon."

SUB-CLAUSE 29.2 - WORKING IN AND DEALING WITH EXISTING WATER FLOWS

Add the following Sub-Clause 29.2:

"The Contractor shall take all necessary measures to remove water including ground water flows from the area of his work when, necessary and/or as required by the Engineer to allow satisfactory execution of work in progress or for the protection of completed work. The exception to this requirement is established irrigation ditches or other irrigation structures. In the case of this type of water flow, the Contractor shall proceed in accordance with the requirements of Sub-Clause 8.7."

SUB-CLAUSE 29.3 - LOCATION AND PROTECTION OF UTILITIES AND EXISTING STRUCTURES

Add the Following Sub-Clause 29.3:

Juba-Nimule Road - Package 3 (Volume 3,000)
Southern Sudan

Conditions of Particular Application

"Before commencing construction work the Contractor shall undertake a survey to establish the detailed location of all utilities affected by the Works. Survey results shall be recorded in plan form to the satisfaction of the Engineer and surface pegs fixed on the site to indicate the location of all underground utilities. These pegs shall remain for the duration of the contract.

Where works of either a temporary or permanent nature are to be undertaken by the Contractor in the vicinity of utilities, the Contractor shall adopt appropriate construction methods, provide adequate protective devices and take precautionary measures, in order to avoid damage to the utilities. Any damage to utilities caused directly or indirectly by the Contractor's work will be considered the Contractor's responsibility.

The Contractor shall be responsible for locating all existing structures affected by or affecting the work under this Contract, prior to the start of construction. Any delay or extra expense to the Contractor due to the encountering of existing structures shall not constitute a claim for extra work, additional payment, time or damages."

SUB CLAUSE 34.1A - FOREIGN STAFF AND LABOR

Add the following Sub-Clause 34.1A

"The Contractor may import such staff, and laborers as are required in order to execute the Works. The Contractor must ensure that all such staff and labor obtain the required visas and work permits. The Contractor shall be responsible for the return to the place where they were recruited or to their domicile of all persons whom the Contractor recruited or employed for the purpose of or in connection with the Contract. The Contractor shall be responsible for such persons as are to be returned until they shall have left the site or, in the case of foreign nationals who have been recruited outside the country, shall have left it."

SUB-CLAUSE 34.2 - WEIGHTS AND WAGES AND CONDITIONS OF LABOUR

Add the following Sub-Clause 34.2:

"The Contractor shall pay rates of wages and observe conditions of labor not less favorable than those established for the trade or industry where the work is carried out. In the absence of any rates of wages or conditions of labor so established, the Contractor shall pay rates of wages and observe conditions of labor which are not less favorable than the general level of wages and conditions observed by other employers whose general circumstances in the trade or industry in which the Contractor is engaged is similar."

SUB-CLAUSE 34.3 - EMPLOYMENT OF PERSONS IN THE SERVICE OF OTHERS

Add the following Sub-Clause 34.3:

"The Contractor shall not recruit or attempt to recruit his staff and/or labor from among persons in the service of the Employer, Engineer or the Client."

SUB-CLAUSE 34.4 - REPATRIATION OF LABOUR

Add the following Sub-Clause 34.4:

"The Contractor shall be responsible for the return to the place where they were recruited or to their domicile, all such persons as he recruited and employed for the purposes of, or in connection with, the Contract and shall maintain such persons as are to be so returned in a suitable manner until they shall have left the site or, in the case of persons who are not nationals of, and have been recruited outside the Sudan,

Juba-Nimule Road - Package 1: (0+000-55+000)
Southern Sudan

Section
Conditions of Particular Application

shall have left Sudan."

SUB-CLAUSE 34.5 - HOUSING FOR LABOUR

Add the following Sub-Clause 34.5:

"Save insofar as the Contract otherwise provides, the Contractor shall provide and maintain such accommodation and amenities as he may consider necessary for all his staff and labor, employed for the purposes of or, in connection with the Contract, including all fencing, water supply (both for drinking and other purposes), electricity supply, sanitation, cookhouses, fire prevention and fire-fighting equipment, air conditioning, cookers, refrigerators, furniture and other requirements in connection with such accommodation or amenities. On completion of the Contract, unless otherwise agreed with the Employer, the temporary camps/housing provided by the Contractor shall be removed and the site reinstated to its original condition, all to the approval of the Engineer."

SUB-CLAUSE 34.6 - MEASURES AGAINST INSECT AND PEST NUISANCE

Add the following Sub-Clause 34.6:

"The Contractor shall at all times take the necessary precautions to protect all staff and labor employed on the Site from insect nuisance, rats, and other pests and reduce the dangers to health and the general nuisance caused by the same. The Contractor shall provide his staff and labor with suitable prophylactics for the prevention of malaria and shall take steps to prevent the formation of stagnant pools of water. He shall comply with all the regulations of the local health authorities in these respects and shall in particular arrange to spray thoroughly with approved insecticide all buildings erected on the Site. Such treatment shall be carried out at least once a year or as instructed by the Engineer. The Contractor shall warn his staff and labor of the dangers of bilharzias and wild animals."

SUB-CLAUSE 34.7 - EPIDEMICS

Add the following Sub-Clause 34.7:

"In the event of any outbreak of illness of an epidemic nature, the Contractor shall comply with and carry out such regulations, orders, and requirements as may be made by the government or the local medical or sanitary authorities for the purpose of dealing with and overcoming the same."

SUB-CLAUSE 34.8 - BURIAL OF THE DEAD

Add the following Sub-Clause 34.8:

"The Contractor shall make any necessary arrangements for the transport, to any place as required for burial, of any of his expatriate employees or members of their families who may die in Sudan. The Contractor shall also be responsible, to the extent required by the local regulations, for making any arrangements with regard to burial of any of his local employees who may die while engaged upon the Works."

SUB-CLAUSE 34.9 - SUPPLY OF FOODSTUFFS

Add the following Sub-Clause 34.9:

"The Contractor shall arrange for the provision of a sufficient supply of suitable food at reasonable prices for all his staff, labor, and subcontractors for the purposes of or in connection with the Contract."

GEN

Juba-Nimule Road - Package 1: (04001-037000)	Section
Southern Sudan	Conditions of Particular Application

SUB-CLAUSE 34.10 - SUPPLY OF WATER

Add the following Sub-Clause 34.10:

"The Contractor shall, so far as is reasonably practicable, having regard to local conditions, provide on the Site an adequate supply of drinking and other water for the use of his staff and labor."

SUB-CLAUSE 34.11 - ALCOHOLIC LIQUOR OR DRUGS

Add the following Sub-Clause 34.11:

"The Contractor shall not, otherwise than in accordance with the Statutes, Ordinances, and Government Regulations, or Orders for the time being in force, import, sell, give, barter, or otherwise dispose of any alcoholic liquor or drugs, or permit or suffer any such importation, sale, gift, barter, or disposal by his subcontractors, agents, staff, or labor. Any person(s), regardless of their position in the Contractor's organization, found in violation of the provisions of this Sub-Clause shall be removed from the Works pursuant to the provisions of Sub-Clause 16.2."

SUB-CLAUSE 34.12 - ARMS AND AMMUNITION

Add the following Sub-Clause 34.12:

"The Contractor shall not give, barter, or otherwise dispose of, to any person or persons, any arms or ammunition of any kind or permit or suffer any such importation, sale, gift, barter, or disposal by his subcontractors, agents, staff, or labor. Any person(s), regardless of their position in the Contractor's organization, found in violation of the provisions of this Sub-Clause shall be removed from the Works pursuant to the provisions of Sub-Clause 16.2."

SUB-CLAUSE 34.13 - FESTIVALS AND RELIGIOUS CUSTOMS

Add the following Sub-Clause 34.13:

"The Contractor shall, in all dealings with his staff and labor, have due regard to all recognized festivals, days of rest, and religious and other customs."

SUB-CLAUSE 34.14 - DISORDERLY CONDUCT

Add the following Sub-Clause 34.14:

"The Contractor shall at all time take all reasonable precautions to prevent any unlawful, riotous, or disorderly conduct by or among his staff and labor and take all reasonable steps to maintain the safety of peace and protection of persons and property. Any person(s), regardless of their position in the Contractor's organization, found in violation of the provisions of this Sub-Clause shall be removed from the Works pursuant to the provisions of Sub-Clause 16.2."

SUB-CLAUSE 34.15 - TRAFFICKING VICTIM PROTECTION

Add the following Sub-Clause 34.15:

"The Employer may terminate this Contract agreement, without penalty, if the Contractor or any of its Subcontractors (i) engages in severe forms of trafficking in persons or has procured a commercial sex act during the period of time the Contract is in effect, or (ii) uses forced labor in the performance of the Contract agreement."

Juba-Nimule Road - Package 1: (0+000-55+000)
Southern Sudan

Section 1
Conditions of Particular Application

MATERIAL, PLANT AND WORKMANSHIP

SUB-CLAUSE 36.1 - QUALITY OF MATERIALS, PLANT AND WORKMANSHIP

Delete the text of Sub-Clause 36.1 and replace it with the following:

"All materials, Plant and workmanship shall be:

- (a) of the respective kinds described in the Contract and in accordance with the Engineer's instructions, and
- (b) subjected from time to time to such tests as the Engineer may require, the Specifications may require and/or the Contractor's Quality Control plan may require, at the place of manufacture, fabrication or preparation, or on the Site or at such other place or places as may be specified in the Contract, or at all or any of such places.

The Contractor shall provide such field and laboratory technicians, labor, electricity, fuels, stores, apparatus, testing equipment and instruments as are normally required for examining, measuring and testing any materials or Plant and shall supply samples of materials, before incorporation in the Works, for testing as may be selected and required by the Engineer or as may be required by the Specifications and/or the Contractor's Quality Control Plan."

SUB-CLAUSE 36.2 - COST OF SAMPLES

Delete the text of Sub-Clause 36.2 and replace it with the following Sub-Clause 36.2:

"All samples shall be supplied by the Contractor at his own cost."

SUB-CLAUSE 36.3 - COST OF TESTS

Delete the text of Sub-Clause 36.3 and replace it with the following:

"The cost of making all tests shall be borne by the Contractor."

SUB-CLAUSE 36.4 - COST OF TESTS NOT PROVIDED FOR

Delete Sub-Clause 36.4 in its entirety.

SUB-CLAUSE 36.5 - ENGINEER'S DETERMINATION WHERE TEST NOT PROVIDED FOR

Delete Sub-Clause 36.5 in its entirety.

SUB-CLAUSE 37.1 - NOTICE OF NONCONFORMANCE AND TESTING

Delete Sub-Clause 37.1 in its entirety.

SUB-CLAUSE 37.4 - REJECTION

Delete the text of Sub-Clause 37.4 and replace it with the following:

~~At any time and place the Engineer determines that the materials or Plant are otherwise not in accordance with the Contract, he may reject the materials or Plant and shall notify the Contractor thereof immediately. The Notice of Nonconformance shall state the Engineer's objections with reasons. The Contractor shall, after receipt of such Notice of Nonconformance, immediately take corrective action. Such notice, when delivered to the Contractor at the site of the work, shall be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the Engineer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders shall be made the subject of claim for extension of~~

Juba-Nimule Road - Packaged - 105000 554060
 Southern Sudan

Conditions of Particular Application

time or for additional costs or damages by the Contractor."

SUB-CLAUSE 37.5 - INDEPENDENT INSPECTION

Delete the last sentence of Sub-Clause 37.5

SUB-CLAUSE 37.6 - CONTRACTOR QUALITY CONTROL

Add the following Sub-Clause 37.6:

"The Contractor is responsible for quality control of all construction, materials, manufacturing, and installation of the Works. The Contractor shall establish and maintain an effective construction quality control organization and system. The quality control system shall be adequate to cover all operations, and shall be keyed to the Contractor's Program. The quality control system shall consist of plans, procedures, and organization necessary to produce an end product, which complies with the Contract requirements. It shall cover all operations including on-site and off-site production or fabrication, material sampling, testing, inspection and management control to ensure that work conforms to the Contract Documents.

Three phases of control shall be carried out by the Contractor for the quality control of each definable feature of the work as follows:

Preparatory Phase

Conduct the preparatory phase prior to beginning work on each definable feature of work after all required plans, documents and or materials have been accepted or approved. This phase shall include:

- (a) Review each paragraph of the applicable specification sections;
- (b) Review drawings;
- (c) Verify that appropriate shop drawings and submittals for materials and equipment have been submitted and approved. Verify receipt of approved factory test results, when required;
- (d) Ensure that provisions have been made to provide the required QC testing;
- (e) Examine the work area to ensure that the required preliminary work has been completed;
- (f) Examine the required materials, equipment and sample work to ensure that they are on hand and conform to the approved shop drawings and submitted data;
- (g) Review the safety plan and appropriate activity hazard analysis to ensure that applicable safety requirements are met; and
- (h) Discuss construction methods and the approach that will be used to provide quality construction by planning ahead and identifying potential problems for each definable feature of work.

Initial Phase

When construction crews are ready to start work on a definable feature of work, the following for each definable feature of work shall be accomplished:

- (a) Review preparatory phase requirements;
- (b) Ensure that all work is in compliance with Contract requirements;

Juba-Nimule Road - Package 1: (0+000-55+000)
 Southern Sudan

Section
Conditions of Particular Application

- (c) Ensure that work is being carried out in accordance with Contract requirements;
- (d) Ensure that all required testing is being carried out
- (e) Verify and ensure that the level of workmanship meets requirements; and
- (f) Ensure that applicable safety and environmental requirements are met.

Follow-Up Phase

Perform the following for on-going work daily, or more frequently as necessary until the completion of each definable feature of work:

- (a) Ensure the work is in compliance with Contract requirements;
- (b) Ensure that the quality of workmanship required is maintained;
- (c) Ensure that required testing is being performed; and
- (d) Ensure that rework items are being corrected."

SUB-CLAUSE 37.6.1 - REQUIREMENTS FOR CONTRACTOR'S QUALITY CONTROL PLAN

Add the following Sub-Clause 37.6.1:

"The Contractor shall furnish for review, comment and approval by the Engineer, within 28 calendar days of receipt of the Letter of Acceptance a detailed Contractor's Quality Control plan (QCP). The QCP is the means by which the Contractor assures himself and the Employer that the services and work supplied comply with the requirements of the Contract. Construction will be permitted to begin only after acceptance of the QCP or acceptance of an interim plan applicable to the particular feature of work to be started. Work outside the features of work included in the interim plan will not be permitted to begin until receiving the Engineer's concurrence of a QC Plan or another interim plan containing the additional features of work to be started.

Acceptance or approval of the QCP by the Engineer shall in no way relieve the Contractor of his responsibilities to construct the works in accordance with the contract Documents.

Content of the QC Plan

The QC plan shall include, as a minimum, the following to cover all construction operations, both on-site and off-site, including work by Subcontractors, fabricators, suppliers and purchasing agents:

- (a) A description of the quality control organization, including a chart showing lines of authority and acknowledgment that the QC staff shall conduct inspections for all aspects of the Works. The staff shall include a Construction Quality Control Manager who shall report to an executive of the Contractor's organization.
- (b) The name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned to the Quality Control Organization.
- (c) A copy of the letter to the Construction Quality Control Manager signed by an authorized official of the firm that describes the responsibilities and delegates sufficient authority to adequately perform the functions of the QC Manager. This shall include the authority to stop work, which is not in compliance with the Contract Documents, and to remove any and all nonconforming work placed or installed by the Contractor.

ENGLISH

Juba-Nimule Road - Package 2: (Item No. 2000)
Southern Sudan

Conditions of Particular Application

- (d) The QC Manager shall issue letters of direction to all other various Quality Control representatives outlining duties, authorities and responsibilities. Copies of these letters will also be furnished to the Engineer.
- (e) Procedures for scheduling, reviewing, certifying, and managing submittals, including those of Subcontractors, off-site fabricators, suppliers and purchasing agents.
- (f) Control, verification and acceptance testing procedures for each specific test to include the test name, specification paragraph requiring test, feature of work to be tested, test frequency, and person responsible for each test and identification of the laboratory or testing service that will perform the test.
- (g) Procedures for inspection of the works including, three phase control of for each definable feature of the work, approvals for acceptance of work, acceptance testing and documentation.
- (h) Procedures for tracking construction deficiencies from identification through acceptable corrective action. These procedures will establish verification that identified deficiencies have been corrected as well as the Engineer's approval of such corrective actions.
- (i) Reporting procedures, including proposed reporting formats and samples of proposed quality control records, testing forms, and reporting forms.

The Engineer's approval of the Contractor's QCP is required prior to the start of construction. Approval is conditional and will be predicated on satisfactory performance during the construction. The Engineer reserves the right to require the Contractor to make changes in his QC plan, organization and operations including removal of personnel, as necessary, to obtain the necessary and/or specific quality.

After acceptance of the QCP, the Contractor shall notify the Engineer in writing a minimum of seven (7) calendar days prior to any proposed change. Proposed changes are subject to the approval of the Engineer.

SUB-CLAUSE 37.6.2 - QUALITY CONTROL MEETINGS

Add the following Sub-Clause 37.6.2:

"Before start of construction, and prior to approval by the Engineer of the Quality Control Plan, the Contractor with his QC Manager shall meet with the Engineer and discuss the Contractor's quality control system. During the meeting, a mutual understanding of the system details shall be developed, including the forms for recording the QC operations, control activities, testing, administration of the system and any other details necessary to define the Contractor's quality control system. The minutes of the meeting shall be prepared and be signed by the Contractor's QC Manager, the Contractor's Project Manager, and the Engineer. The minutes shall become a part of the Contract file. There may be occasions when subsequent conferences will be called by either party to reconfirm mutual understandings and/or address deficiencies in the QC system or procedures which may require corrective action by the Contractor.

In addition to the Initial Quality Control Coordination Meeting, the Engineer shall schedule weekly QC meetings, which shall be attended by the Contractor's Project Manager, QC Manager and Project Superintendent. The agenda for the meeting shall include, but not be limited to the following:

- (a) Review all test results and QC reports for operations executed on the

SISP (USAID) Southern Sudan

Conditions of Particular Application - Page 52 of 83

Juba-Nimule Road - Package 1: (0+000-55+000)
Southern SudanSection i
Conditions of Particular Application

project during the previous week

- (b) Discuss of any construction deficiencies that took place the previous week. The Contractor shall be prepared to discuss any proposed corrective action plans as well as his proposed changes implemented to prevent a re-occurrence of the same incident.
- (c) Detailed discussions of the contractor's execution plan for any new activities scheduled for the following week. The Contractor shall be prepared to discuss the contract testing and QC requirements for the new activity of work and the operational plan that will assure compliance with the Contract Documents and approved QC Plan.
- (d) The Contractor, if instructed, shall prepare the draft of the minutes in both paper and electronic format for the weekly QC meeting and submit it to the Engineer for review and distribution.

SUB-CLAUSE 37.6.3 - CONTRACTOR'S QUALITY CONTROL ORGANIZATION

Add the following Sub-Clause 37.6.3:

Quality Control (QC) Manager

The Contractor shall identify an individual within his organization at the Works who shall be responsible for overall management of QC organization and have the authority to act in all QC matters for the Contractor. The QC Manager shall be a graduate engineer with a minimum of 10 (ten) years design and/or construction experience on work similar in type to this Contract. The QC Manager shall be assigned no other duties. The QC Manager shall be on the site at all times during construction and will be employed by the Contractor. An alternate to the QC Manager will be identified in the plan to serve in the event of the QC Manager's absence. The period of absence may not exceed two (2) weeks at any one time, and not more than 30 (thirty) workdays during a calendar year. The requirements for the alternate will be the same as for the designated QC Manager. The QC Manager shall report directly to an executive of the Contractor's organization and have equivalent authority and status as the Contractor's Project Manager.

He shall have the responsibility and authority to override the Contractor's Project Manager on all aspects relating to the quality and Quality Control of the Works including the responsibility and authority to stop work which is not in compliance with the Contract and to remove any and all non-conforming work placed or installed by the Contractor and/or his Subcontractors and/or agent(s) on the Works.

QC Staff

The only responsibility that any member of the Contractor's quality control organization can have in this Contract is quality control. It is intended that there be a separation of the QC from production efforts. If the Engineer determines that the QC Manager or any of his support personnel do not meet the quality control requirements of the Contract, or if they are engaging in the production work associated with the Contract, the Engineer may in writing require the Contractor to remove such personnel from the Site.

The staff must be of sufficient size to ensure adequate QC coverage of all work phases, work shifts, and work crews involved in the construction. All QC staff must be fully qualified by experience and technical training to perform their assigned QC responsibilities. The QC plan will clearly state the duties and

Sister Organization
SISF (USAID) Southern Sudan

Conditions of Particular Application - Page 53 of 81

Juba-Nimule Road - Package II (07000-SS-1000)
 Southern Sudan

Section 37
Conditions of Particular Application

v1

responsibilities of each staff member as well as his experience, training and technical education.

QC Organizational Changes

The Contractor shall obtain the Engineer's approval in writing before replacing any member of the QC staff. Requests for approval shall include the approval of the quality control manager as well as the names, qualifications, duties, and responsibilities of each proposed replacement. The contractor is responsible for ensuring that any replacements are proposed and approved prior to any such replacement occurring."

SUB-CLAUSE 37.6.4 - QUALITY CONTROL DOCUMENTATION

Add the following Sub-Clause 37.6.4:

"The Contractors Quality Control Organization shall maintain current records of quality control operations, activities, and tests performed, including the work of Subcontractors and suppliers. These records shall be on a daily report form acceptable to the Engineer and shall include factual evidence that required quality control activities and/or tests have been performed, including but not limited to the following:

- (a) Work performed each day, giving location, description, and by whom.
- (b) Type and number of control activities and tests involved.
- (c) Results of control activities or tests.
- (d) Deficiencies noted along with proposed remedial action or corrective action.
- (e) Control activities performed with results and references to specifications and/or Drawing requirements.

The Engineer may require the Contractor to provide additional information in a format required by the Engineer. Such form (s) may replace the Contractors forms for like work."

SUB-CLAUSE 37.6.5 - CONTRACTOR QUALITY CONTROL TESTS AND TESTING

Add the following Sub-Clause 37.6.5:

Testing Procedures

The Contractor shall perform tests specified or required to verify that control measures are adequate to provide a product that conforms to Contract and specification requirements. Testing includes operation and/or acceptance tests when specified or required. A list of tests to be performed shall be furnished as a part of the QC plan. The list shall give the test name, frequency, specification paragraph containing the test requirements, the personnel and laboratory responsible for each type of test, and an estimate of the number of tests required.

The Contractor shall perform the following activities and record and provide the following data for approval by the quality control manager and the Engineer:

- Verify that testing procedures comply with Contract requirements.
- Verify that facilities and testing equipment are available and comply with testing standards.
- Check test instrument calibration data against certified standards.
- Verify that recording forms and test identification control number system,

SISP (USAID) Southern Sudan

Conditions of Particular Application - Page 54 of 81

Juba-Nimule Road - Package 1: (0+000-55+000)
Southern Sudan

Section
Conditions of Particular Application

including all of the test documentation requirements, have been prepared.

Results of all tests taken, both passing and failing tests, will be recorded on the quality control report for the date taken. Specification paragraph reference, location where tests were taken, and the sequential control number identifying the test will be given.

All test results shall be certified by the QC manager. Every test form shall contain the following statement:

'It is hereby certified that the information contained in these records is accurate and that all work documented herein complies with the requirements of the Contract. Any exceptions to this certification are documented as a part of this record.'

An information copy of tests performed by an off-site or commercial test facility will be provided directly to the Engineer.

Failure to submit timely test reports, as stated, may result in nonpayment for related work performed and/or disapproval of the test facility.

Testing Laboratory

The Contractor's quality control organization shall maintain and operate a laboratory on site during the duration of the construction activities of the Works to accomplish all on-site testing.

The quality control testing laboratory shall be fully equipped with all necessary equipment and trained personnel to properly conduct all on-site testing in accordance with specified and appropriate materials testing procedures and shall meet appropriate criteria detailed in ASTM E 329, ASTM C 1077, ASTM D 3666, ASTM D 3740, ASTM E 543 and ASTM E 548.

In the Contractor's quality control plan, all on-site testing by the testing laboratory shall be noted, as well as any testing the Contractor proposes to be accomplished off-site by other laboratories.

A complete listing of the proposed on-site testing equipment and available off-site testing equipment of the testing laboratory shall be noted in the Contractor's quality control plan.

Capability and Check of Testing Laboratories

The Engineer reserves the right to check laboratory equipment in the laboratory for compliance with the standards set forth in the Contract Documents and Specifications and to check the laboratory's technicians testing procedures and techniques.

Engineer's Access And Use of Laboratory Facilities

The Engineer shall at all times have full access to the Contractor's on site Laboratory and laboratory records. The Engineer may at any time use the Contractor's on-site laboratory facilities to conduct independent testing or require the laboratory personnel to conduct such testing.

Engineer's Laboratory Office

The Contractor shall provide a private lockable office, for the exclusive use by the Engineer, at the laboratory. The office shall be at least 48 m² and be equipped with one computer, one inkjet printer, two desks, three desk chairs, one book shelf, one

Job 4-Nimule Road - Package 2 (0-000 55-000)
Southern Sudan

Conditions of Particular Application

lockable file cabinet, one table, a waste basket, and other necessary office supplies as required by the Engineer."

SUB-CLAUSE 37.6.6 - MATERIAL SAMPLING

Add the following Sub-Clause 37.6.6:

"A material sampling schedule noting time and frequency of testing and sampling of all materials shall be fully detailed in the Contractor's Quality Control Plan.

Any material that appears defective or inconsistent with similar material being produced shall be sampled, unless such material is voluntarily removed and replaced or corrected."

SUB-CLAUSE 37.6.7 - TRANSMITTAL OF TEST REPORTS

Add the following Sub-Clause 37.6.7:

"The testing laboratory shall furnish three copies of a written report of each test performed by laboratory personnel in the field or laboratory. Two copies of each test report shall be distributed to the Engineer and one copy to the Contractor's Quality Control Manager within two calendar days after each test is completed. Laboratory submittal procedures and requirements shall be detailed in the Contractor's Quality Control plan. All procedures for submission shall at a minimum, conform to the requirements as given in Sub-Clause 7.8 of these conditions, and approved by the Engineer.

Written reports of tests and engineering data furnished by the Contractor for the Engineer's review of materials and equipment proposed to be used in the Works shall be submitted as specified and detailed in the Contractor's Quality Control Plan. In addition to the written paper copies of all tests and engineering data, the Contractor shall submit at least weekly electronic copies of all such tests, engineering data and all other documents. The electronic format shall be in the form of Adobe 'PDF' files or other format as agreed by the Engineer."

SUB-CLAUSE 37.6.8 - MANUFACTURER'S CERTIFICATION AND TESTS

Add the following Sub-Clause 37.6.8:

"Manufacturer certification may be furnished by the Contractor on items of materials and equipment to be provided only when this method will assure, to the satisfaction of the Engineer, full compliance with the provisions of the Contract. Pre-printed certifications will not be acceptable. All certifications shall be originals.

Manufacturer's certification on materials and equipment shall be in accordance with the applicable specification standards or codes. The manufacturer's certification shall have the manufacturer's name and address. The certifications are based on. Any material certifications that are not referred to the codes governing specification standards (ASTM, AASHTO, etc.) listed in the contract shall not be accepted, unless evidence is provided by the Contractor that the standard by which the materials are certified is at least equal to the contract specified standard(s). If requested by the Engineer, the Contractors shall also submit electronic copies of the scanned originals in an agreed format.

Certified tests on materials to be incorporated into the structures will be acceptable, provided that they are performed by the manufacturer or by approved agencies or laboratories and show the materials conform to the Specifications."

Out of

Juba-Nimule Road - Package 1: (0+000-55+000). **Section**
Southern Sudan **Conditions of Particular Application**

SUB-CLAUSE 37.6.9- OFF-SITE TESTING AND INSPECTIONS BY SPECIALIZED LABORATORY

Add the following Sub-Clause 37.6.9:

"In the case of foreign equipment and materials, an independent specialized laboratory approved by the Engineer shall certify the off-site testing and inspections. All off-site testing and inspections shall be completed to the satisfaction of the Engineer prior to shipment from the factory to the Sites."

Sub-Clause 37.6.10 – Pre-Final Inspection

Add the following Sub-Clause 37.6.10:

"Prior to completion of all Works or any increment thereof and before inspection by the Engineer, the QC Manager and/or his staff shall conduct an inspection of the work and develop a list of items which do not conform to the plans and specifications. Such a list of deficiencies shall be included in the QC documentation and shall include the estimated date by which the deficiencies will be corrected. The QC Manager or staff shall make a second inspection to ascertain that all deficiencies have been corrected and so notify the Engineer."

Sub-Clause 37.7 - OPERATION AND MAINTENANCE MANUALS AND TRAINING

Add the following Sub-Clause 37.7:

"The Contractor shall submit comprehensive Operation and Maintenance Manuals to cover all aspects of the Contractor's supplied equipment, Plant and systems.

The Maintenance Manuals and/or Handbooks shall include but not be limited to suggesting type of periodic inspection and intervals, materials, methods, equipment and personnel qualifications which should be employed by the Ministry of Public Works for Post Construction Maintenance for Pavement, Shoulders, Bridges, Slopes and Drainage Structures.

Operation and Maintenance Manuals shall be prepared by system for each facility of the Works and will show schematically each system, its parts and fully describe the maintenance and operation requirements and procedures for the system and all equipment within the system. The manuals shall identify all parts, equipment and accessories of each system, their location(s) as well as all wiring diagrams, circuits,

shall include a complete spare part numbers as well as:

- manufacturers recommended 3 and 5 year spare parts inventory lists; and
- Contact information (telephone, fax and address) and delivery times for ordering spare parts and replacement parts and replacement equipment.

For all equipment of all systems, the O&M manuals shall fully describe and detail requirements, procedures and servicing intervals for planned preventive maintenance and provide sufficient information on all equipment principles and practices to enable first line fault diagnosis and rectification by technical staff.

All special equipment necessary for the operation and maintenance of all systems shall be noted in the O&M manuals, as well as necessary tools and materials.

Juba-Nimule Road - Package 1 (0100055+000)
Southern SudanSection:
Conditions of Particular Application

Procedures for the operation of all systems and all equipment of each system, including normal operation, start-up and shutdown as well as emergency start-up and shut-down shall be included in the O&M manuals.

The Contractor shall instruct designated operation and maintenance personnel, in the operation, maintenance and adjustment requirements and procedures of all systems and all equipment to their complete understanding.

O&M training shall include "hands on" instruction and demonstrations of systems and system equipment as well as classroom instruction.

The Contractor's O&M manuals shall be used as a basis for its Operation and Maintenance training. Prior to the completion of the Works or any section of the Works, the Contractor shall meet with the Engineer to review and establish detailed procedures and requirements for its O&M training.

Issuance of a Taking-Over Certificate for the Works or any part of the Works shall not be made until the Operations and Maintenance Manuals (both paper and electronic copies) and Operations and Maintenance Training have been completed and received the approval of the Engineer."

SUB-CLAUSE 38.3 - PROTECTION OF WORKS FROM THE WEATHER

Add the following Sub-Clause 38.3:

"The Contractor shall, be responsible for protecting all work, Plant and materials from injury or damage by the weather. Such protection shall include all necessary protection of stored and stockpiled materials to be incorporated in the Works including but not limited to such protection that may be necessary to protect material stock piles from becoming contaminated by sand storms."

SUB-CLAUSE 38.4 - BACKFILLING HOLES AND TRENCHES

Add the following Sub-Clause 38.4:

"The Contractor, upon completion of any part of the work, shall immediately fill up all holes and trenches, or carry out the work to them as required by the Engineer, that he may have dug or excavated and are no longer required for the project, and he shall clear away all rubbish and material that is no longer required for the execution of the work."

SUB-CLAUSE 38.5 - RECEIVING, HANDLING AND STORAGE OF MATERIALS AND PLANT

Add the following Sub-Clause 38.5:

ANB

- All Plant, component parts, tools, spare parts, and miscellaneous items shall be suitably packaged to facilitate handling and storage and to protect against damage or deterioration during transit to and short term storage in Sudan.
- Painted surfaces shall be protected against impact, abrasion, discolouration, and other damage.
- Grease and lubricating oil shall be applied to all bearings and similar items.
- Articles subject to damage or deterioration during shipment, handling, or

Juba-Nimule Road - Package 1: (0+000-55+000)
Southern SudanSection 1
Conditions of Particular Application

storage due to defective or inadequate packing, shall be repaired or replaced by Contractor at no expense to the Employer.

Delivery

- The Contractor shall bear the responsibility for delivery of Plant, spare parts, special tools and materials to the job site.
- The Contractor shall, either directly or through contractual arrangements with others, accept responsibility for the safe handling and protection of the equipment and materials furnished and shipped under this Contract before and after receipt the Site. Acceptance of the equipment or materials shall be made after it is installed, tested and placed in operation and found to comply with all the specified requirements.

Invoicing Instructions

- The project name, name of the Contractor and the name of the Employer and Client must be clearly indicated on the air waybill or bill of lading. The bill of lading or air waybill shall contain instructions to notify the Employer or a clearing agent, but the consignee must be the Contractor.

Storage Facilities

- The Contractor shall provide and maintain storage facilities within the limits of the Site to store all materials and Plant, protecting them from moisture and deterioration, and in such a way that each crate is readily accessible and the contents identifiable without movement. The Contractor shall submit to the Engineer for review complete details of the type of temporary storage facilities proposed with his mobilization plan.

Storage

- Upon delivery, all Plant and materials shall immediately be stored and protected until installation at the Site and incorporation into the Works.
- Stored items shall be laid out to facilitate their retrieval for use in the programmed order. Care shall be taken in drawing the equipment or materials for use to ensure the precise piece of equipment or material is removed.
- Stacked items shall be adequately protected from damage by spacers or load distributing supports that are safely arranged.
- No metalwork (sheet piling, reinforcing steel, etc.) shall be stored directly on the ground.
- Bulk cement shall be stored in silos or bulk cement container cars shutting out moisture.
- Packed cement shall be stored in container boxes to keep from moisture and the Contractor before usage, shall check the quality of cement.
- Pipe fittings and valves may be stored outdoors but must be placed on wooden blocking and protected from the weather.
- PC tendons, sheath and related parts shall be kept in a warehouse in the manner specified by manufacturers.

AWB

Juba-Nimule Road - Package II (000000000000)
Southern SudanSection
Conditions of Particular Application

- PVC pipe, geo-textile membranes, plastic liner and other plastic materials shall be stored off the ground on pallets and protected from direct sunlight.
- Pumps, motors, electrical Plant, and all Plant with antifriction or sleeve bearings shall be stored in weather tight structures. Electrical Plant controls and insulation shall be protected against moisture and water damage.
- Plant having moving parts, such as gears, bearings, and seals, shall be stored fully lubricated with oil, grease, etc., unless otherwise instructed by the manufacturer. The Contractor shall carefully follow the manufacturer's storage instructions.

SUB-CLAUSE 38.6 - EMPLOYER SUPPLIED MATERIALS FOR THE WORKS

Add the following Sub-Clause 38.6:

"The Employer may at its option or will if required by the Contract Documents supply materials for the Works to the Contractor. The Employer, in consultation and coordination with the Contractor, may arrange for the loading, unloading and transport of such Employer supplied materials to the location or locations where they are required by the Contractor for incorporation into the Works or storage.

Prior to turning over any Employer supplied material(s) to the Contractor the Engineer shall prepare documentation signifying the type(s) and quantity(s) of materials being supplied to the Contractor for signature by the Contractor for the receipt from the Engineer of such material(s). Prior to receiving any/all Employer supplied material, it shall be the responsibility of the Contractor to inventory all such material(s) before signing receipt of the type(s) and amount(s) of material(s) received. If the Contractor's inventory differs from that indicated in the documentation provided by the Engineer, the Contractor shall in consultation with the Engineer either annotate such documentation presented by the Engineer or cause a new document with revised type(s) and amount(s) of material(s) to be provided by the Engineer. Documentation presented by the Engineer and annotated by the Contractor shall be initialed (at each and all entries annotated) by the Contractor's representative receiving the material(s) and the Engineer's Representative responsible for transferring the material(s). The signature of the Contractor's representative on documentation prepared by the Engineer for receiving any and all Employer supplied material(s) (whether the document has or has not been annotated as described above) shall denote the acceptance by the Contractor of the type(s) and amount(s) of material(s) of Employer supplied material(s) provided to the Contractor. And the Contractor shall be responsible for, including rectifying any shortfalls that may arise, the type(s) and amount(s) of material(s) supplied to the Contractor.

It is the responsibility of the Contractor to ensure the storage and protection from the weather of the Employer supplied materials in accordance with 38.3 and 38.5 of all Employer supplied materials it has signed receipt for.

The Employer shall be entitled to compensation, including transportation to the Site, for all material supplied by the Employer to the Contractor for incorporation in the Works that are included in the Contract Price. Such compensation shall be in the form of an adjustment to the Contract Price pursuant to Clause 51 of the Conditions of Contract."

COMMENCEMENT AND DELAYS

SISP (USA) Southern Sudan

Conditions of Particular Application - Page 60 of 81

Juba-Nimule Road - Package 1: (0+000-55+000)
Southern Sudan

Section
Conditions of Particular Application

SUB-CLAUSE 41.2 - MOBILIZATION

Add the following Sub-Clause 41.2:

"The Contractor shall complete construction of all temporary facilities and mobilization of all key personnel, equipment and plant no later than ninety (90) calendar days after the Notice to Commence.

No later than ten (10) calendar days after Letter of Acceptance the Contractor shall submit a mobilization plan to the Engineer for his approval. The program shall include a Program noting the anticipated arrival of all construction equipment and the arrival of all-key Contractor personnel and Subcontractors and the construction of temporary facilities.

No later than fourteen (14) days after receipt of the Notice to Commence, the Contractor shall provide a layout plan noting the location, size and arrangement of all temporary facilities, including security fencing and entrance and exit gates, sewage and water lines and systems, electrical supply and access and facility roads".

SUB-CLAUSE 48.5 - DEFINITION OF SUBSTANTIAL COMPLETION

Add the following Sub-Clause 48.5:

"Substantial Completion is defined as occurring when the road is sufficiently completed such that it is safe for use by the traveling public (with all necessary road markings and signs) and will not need to be closed or have free traffic flow obstructed or require any diversions or bypasses to complete and works remaining to be executed or defects to be rectified."

ALTERATIONS, ADDITIONS AND OMISSIONS

SUB-CLAUSE 52.3- VARIATIONS EXCEEDING 15 PER CENT

Deleted in its entirety

PROCEDURES FOR CLAIMS

Sub-Clause 53.3 - Claims
"Claims for variations in the quantity of work or for variations in respect thereof shall not exceed such amount as the Engineer considers to be verified by contemporary records (whether or not such records were brought to the Engineer's notice as required under Sub-Clauses 53.2 and 53.3)."

CONTRACTOR'S EQUIPMENT, TEMPORARY WORKS AND MATERIALS

SUB-CLAUSE 54.1 - CONTRACTOR'S EQUIPMENT, TEMPORARY WORKS AND MATERIALS; EXCLUSIVE USE FOR THE WORKS

Sub-Clause 54.1
Sub-Clause 54.1 is amended by adding the following after the last paragraph of the clause:

Sub-Clause 54.1.1- The Contractor shall construct suitable entry and exit roads to from and around all temporary facilities. Security fencing shall be constructed around all temporary

Juba-Nimule Road - P.M. 100
Southern Sudan

Conditions of Fungicidal Application

facilities. Fencing shall be chain link and provided with lockable gates at each entry and exit point. Suitable external lighting shall be provided at the entrance to all buildings. All sanitary facilities shall be connected to a suitable sewage system.

The Contractor shall provide all power for operation of his plant and equipment.

The Contractor shall provide temporary lighting for all buildings to protect the Works and maintain suitable working conditions. Temporary lighting shall be maintained until the Engineer has accepted the Works. The Contractor shall provide and install circuit and branch wiring, with area distribution boxes located so that power and lighting are available throughout the construction site. Generators with a suitable capacity shall be furnished by the Contractor.

The Contractor shall furnish temporary sanitary facilities at the Site, as provided herein, for the needs of all construction workers and others performing work or furnishing services on the Project. Sanitary facilities shall be of reasonable capacity, properly maintained throughout the construction period, and obscured from public view, to the greatest practical extent. If chemically treated type toilets are used; at least one such toilet will be furnished for every 20 people. The Contractor shall enforce the use of such sanitary facilities by all personnel at the Site.

The Contractor shall supply, equip and maintain for the Contract period all his own living accommodation, sheds and stores necessary for the execution of the Work.

The Contractor shall have on the Site a suitable workshop, adequately equipped and provided with utilities, to allow for repairs of the equipment employed to carry out the Works. He shall also provide a warehouse for the equipment spare parts, mainly for the parts that frequently fail or are difficult to procure. A chief foreman qualified for mechanical repairs, with an adequate labor force must manage the workshop.

During the performance of the works the Contractor shall maintain all temporary facilities in suitable manner. Upon completion of the Works, or as otherwise directed by the Engineer, all equipment, temporary facilities and encumbrances used for the Works shall be removed, the area effected properly cleaned and repaired and, if necessary, the property owner paid."

MEASUREMENT

Sub-Clause 55.2 - OMISSIONS OF QUANTITIES

Add the following Sub-Clause 55.2:

“...and which no rate or price has been or will be charged in other rates and prices for the same or similar services by the employer.”

THE 101 BEST BIKES IN THE WORLD

Delete the text of Sub-Clause 56.1 in its entirety and replace it with the following:

"The Contractor shall measure all works acceptably completed. The Contractor shall prepare records and drawings of the measurements of Permanent Work that shall be submitted to the Engineer for approval. If after examination of such records and drawings the Engineer withholds his approval, the Engineer and the Contractor together shall retake the measurements using the Contractor's equipment and personnel. In the event of further disagreement concerning the measurement the

SISP (USAID) Southern Sudan

Conditions of Particular Application - Page 62 of 83

Chittagong District Tribal Survey Report

Juba-Nimule Road - Package 1: (0+000-55+000)
Southern Sudan

Section "C"
Conditions of Particular Application

decision of the Engineer shall be final."

SUB-CLAUSE 57.1 - METHOD OF MEASUREMENT

Delete the text of Sub-Clause 57.1 in its entirety and replace it with the following:

"The measurement of the Works shall be performed on the basis of the Specifications. If actual physical measurement exceeds the requirements indicated in the Specifications and/or Drawings, such excess shall not be measured for payment and the Contractor shall not be entitled to any compensation, provided always that the specified measurements are technically acceptable and there is no provision to the contrary in any other part of the Contract Documents.

Except in so far as the Specifications may expressly state to the contrary, all measurement for payment shall be to the neat lines and dimensions shown on the Drawings or approved Shop Drawings or as stipulated by the Engineer.

All work completed under the Contract shall be measured according to the S.I. metric system for all items unless specified otherwise in the Contract Documents."

CERTIFICATES AND PAYMENT

CLAUSE 60 - CERTIFICATES AND PAYMENT

Clause 60 of the General Conditions is deleted (including Sub-Clauses 60.1 through 60.10) and replaced with following new Sub-Clauses 60.1 through 60.14 therefore:

SUB-CLAUSE 60.1 - MONTHLY STATEMENTS

"The Contractor shall submit a statement in the number of copies specified in the Appendix to Bid to the Engineer at the end of each month, in a tabulated form approved by the Engineer, showing the amounts to which the Contractor considers himself to be entitled. The statement shall include the following items, as applicable, which shall be taken into account in the sequence listed:

- (a) the estimated Contract value of the Temporary and Permanent Works executed up to the end of the month in question, determined in accordance with Sub-Clause 56.1, at the unit rates and prices included in the Contract;
- (b) the actual value certified for payment for the Temporary and Permanent Works executed up to the end of the previous month, at the unit rates and prices included in the Contract;
- (c) the estimated Contract value at the unit rates and prices included in the Contract of the Temporary and Permanent Works for the month in question, obtained by deducting (b) from (a);
- (d) the value of any variations executed up to the end of the month in question, less the amount certified in the previous Interim Payment Certificate;
- (e) amounts approved in respect of Day work executed up to the end of the month in question, less the amount for Day work certified in the previous Interim Payment Certificate; and
- (f) any amount to be withheld under the retention provisions of Sub-Clause 60.5, determined by applying the percentage set forth in Sub-Clause 60.5 to the amounts due under Paragraphs 60.1 (c), (d), and (e)."

(J:1B)

Juba-Nimule Road - Block 100 (Area 400)
Southern SudanSection
Conditions of Particular Application

SUB-CLAUSE 60.2 - MONTHLY PAYMENTS

"The said statement shall be approved or amended by the Engineer in such a way that, in his opinion, it reflects the amounts due to the Contractor in accordance with the Contract, after deduction, other than pursuant to Clause 47, of any sums that may have become due and payable by the Contractor to the Employer. In cases where there is a difference of opinion as to the value of any item, the Engineer's view shall prevail. Within 14 calendar days of receipt of the monthly statement referred to in Sub-Clause 60.1, the Engineer shall determine the amounts due to the Contractor and shall deliver to the Employer and the Contractor an Interim Payment Certificate, certifying the amounts due to the Contractor.

The Engineer's Interim Payment Certificate shall include all supportive documentation to quantify the items of work being submitted for payment and all documentation that verifies that the quantities of work completed and are being submitted for payment comply with the provisions of the Contract.

The Engineer shall not be bound to certify any payment under this sub-clause if the net amount thereof, after all retentions and deductions, would be less than the Minimum Amount of Interim Payment Certificates stated in the Appendix to Bid. However, in such case, the unpaid certified amount will be added to the next interim payment, and the cumulative unpaid certified amount will be compared to the minimum amount of interim payment.

Notwithstanding the terms of this clause or any other clause of the Contract, no amount will be certified by the Engineer for payment until the performance security has been provided by the Contractor and approved by the Employer."

SUB-CLAUSE 60.3 - MATERIALS AND PLANT FOR THE PERMANENT WORKS

"With respect to materials and Plant brought by the Contractor to the Site and stored on site prior to incorporation in the Permanent Works, the Contractor, with the Engineer's approval, shall (i) receive a credit in the month in which these materials and Plant are brought to the Site and (ii) be charged a debit in the month in which they are incorporated in the Permanent Works. Such credit and debit shall only apply to those materials and Plant as listed in the Appendix to Bid and be determined by the Engineer in accordance with the following provisions:

(a) no credit shall be given unless the following conditions shall have been met to the Engineer's satisfaction:

- (i) the materials and Plant are in accordance with the specifications for the Permanent Works;
- (ii) the materials and Plant are delivered to the Site and stored there in a manner that is proper;
- (iii) the Contractor's records of the requirements, orders, receipts and use of materials and Plant are kept in a form approved by the Engineer, and such records are available for inspection by the Engineer;
- (iv) any request shall be substantiated with invoices indicating payment of the material(s) delivered to and stored at the Site;
- (v) those material and Plant items that the Contractor desires credit on delivery, must be easily tracked or quantified from delivery to incorporation into the Permanent Works, with the ease of tracking or

AB

Juba-Nimule Road - Package 1: (0+000-55+000)
Southern Sudan

Section
Conditions of Particular Application

quantifying to be determined by the Engineer;

- (b) the amount to be credited to the Contractor shall be the equivalent of 75 percent of the Contractor's cost of the materials and Plant delivered to and stored at the Site, as determined by the Engineer after review of the documents listed in paragraph (a) (iv) above, as determined by the Engineer and at no time shall this amount exceed 75 percent of the total amount of a material or Plant required to be incorporated in the completed Works, as determined by the Engineer;
- (c) the amount to be debited to the Contractor for any materials and Plant incorporated into the Permanent Works shall be equivalent to the credit previously granted to the Contractor for such materials and Plant pursuant to Sub-clause (b) above, as determined by the Engineer."
- (d) Full recovery of credit of materials on site should be complete at most when 80% of the full contract amount, excluding Provisional Sums and variations, is attained.

SUB-CLAUSE 60.4 - PLACE OF PAYMENT

"Payments to the Contractor by the Employer shall be made in the currencies in which the Contract Price is payable into a bank account or accounts nominated by the Contractor."

SUB-CLAUSE 60.5 - RETENTION MONEY

"A retention amounting to the percentage stipulated in the Appendix to Bid of the amounts due, determined in accordance with the procedure set out in Sub-Clause 60.1 (g) shall be made by the Engineer in the first and following Interim Payment Certificates."

SUB-CLAUSE 60.6 - PAYMENT OF RETENTION MONEY

"Upon the issue of the Taking-Over Certificate with respect to the whole of the Works, one-half of the Retention Money, or upon the issue of a Taking-Over Certificate with respect to a Section or part of the Permanent Works only such proportion thereof as the Engineer determines having regard to the relative value of such Section or part of the Permanent Works, shall be certified by the Engineer for payment to the Contractor. The Contractor may substitute the remaining retention money with an on-demand bank guarantee in a form, and from a source, acceptable to the Engineer."

"Upon the expiration of the Defects Liability Period for the Works, the other half of the Retention Money shall be certified by the Engineer for payment to the Contractor (or return of the remaining security, which replaced the Retention Money). Provided that, in the event of different Defects Liability Periods being applicable to different Sections or parts of the Permanent Works pursuant to Clause 48, the expression "expiration of the Defects Liability Period" shall, for the purposes of this sub-clause, be deemed to mean the expiration of the latest of such periods."

"Provided also that if at such time, there shall remain to be executed by the Contractor any work instructed, pursuant to Clauses 49 and 50, in respect of the Works, the Engineer shall be entitled to withhold certification until completion of such work or so much of the balance of the Retention Money as shall, in the opinion of the Engineer, represent the cost of the work remaining to be executed."

SUB-CLAUSE 60.7 - MOBILIZATION PAYMENT

SISP (USAID) Southern Sudan

Juba-Nimule Road - Parkland (100,000,000)
Southern Sudan

Section
Conditions of Particular Application

The Employer will make a payment for the mobilization of the plant, personnel and/or equipment, construction of camp's, etc. as shown in the Bill of Quantities. No mobilization payment will be made until the Contractor has submitted a Mobilization Plan and Schedule, as described in Sub-Clause 41.2, which has been reviewed and approved by the Engineer.

SUB-CLAUSE 60.8 - MOBILIZATION PAYMENT SECURITY

The Contractor shall provide a Mobilization Payment Guarantee / Security to ensure completion of all mobilization activities as shown in the Bill of Quantities. Provision of the Mobilization Payment Security is a condition precedent to the submission of the Mobilization Payment. The Mobilization Payment Security shall be in the form of:

- (a) an unconditional bank guarantee issued either by a Bank located in the USA, or by a foreign bank through a correspondent bank located in the USA; or
- (b) a cash deposit to a named bank account of the Employer; or
- (c) a cash deposit to the Employer.

The Mobilization Payment Security shall be in the amount as stated in the Appendix to Bid.

The Mobilization Payment Security shall be denominated in currencies in which the Contract Price is payable.

SUB-CLAUSE 60.9 - VALIDITY OF THE MOBILIZATION PAYMENT SECURITY

Validity of Mobilization Payment Security shall be for 180 (hundred and eighty) days from Notice to proceed.

Mobilization Payment Security will be returned to the contractor when the Engineer certifies that 100% of the mobilization is achieved.

In the event that contractor fails to complete mobilization within the validity of the Mobilization Payment Security, the same will be forfeited.

SUB-CLAUSE 60.10 - TIME OF PAYMENT AND INTEREST

The amount due to the Contractor under any Interim or Final Payment Certificate shall be paid by the Employer within 14 days from the date of issue of the certificate, provided that the Employer has received payment from USAID.

The amount due to the Contractor under any Interim or Final Payment Certificate within 7 days after the date on which the Employer received the payment for such Interim Payment Certificate from USAID; and

- (b) the Employer shall pay the amount certified in the Final Payment Certificate within 15 days from receipt of payment from USAID, against said certificate.

In the event of the failure of the Employer to make payment within the times stated, the Employer shall pay to the Contractor interest compounded monthly at the rate(s) stated in the Appendix to Bid upon all sums unpaid from the date upon

Juba-Nimule Road - Package 1: (0+000-55+000)
 Southern Sudan

Section
 Conditions of Particular Application

which the same should have been paid, in the currencies in which the payments are due. The provisions of this sub-clause are without prejudice to the Contractor's entitlement under Clause 69 or otherwise."

SUB-CLAUSE 60.11 - CORRECTION OF CERTIFICATES

"The Engineer may by any Interim Payment Certificate make any correction or modification in any previous Interim Payment Certificate that has been issued by him, and shall have authority, if any work is not being carried out to his satisfaction, to omit or reduce the value of such work in any Interim Payment Certificate."

SUB-CLAUSE 60.12 - STATEMENT AT COMPLETION

"Not later than 28 calendar days after the issue of the Taking-Over Certificate in respect of the whole of the Works, the Contractor shall submit to the Engineer a Statement at Completion in the number of copies specified in the Appendix to Bid with supporting documents showing in detail, in the form approved by the Engineer,

- (a) the final value of all work done in accordance with the Contract up to the date stated in such Taking-Over Certificate;
- (b) any further sums which the Contractor considers to be due; and
- (c) an estimate of amounts that the Contractor considers will become due to him under the Contract.

The estimated amounts shall be shown separately in such Statement at Completion. The Engineer shall certify payment in accordance with Sub-Clause 60.2."

SUB-CLAUSE 60.13 - FINAL STATEMENT

"Not later than 45 calendar days after the issue of the Defects Liability Certificate pursuant to Sub-Clause 62.1, the Contractor shall submit to the Engineer for consideration a draft final statement in the number of copies stipulated in the Appendix to Bid with supporting documents showing in detail, in the form approved by the Engineer,

- (a) the value of all work done in accordance with the Contract; and
- (b) any further sums that the Contractor considers to be due to him under the Contract or otherwise.

[REDACTED] shall then consider the draft final statement, and shall give the Contractor such information as the Engineer may require for the preparation of the final statement. The Contractor shall then prepare and submit to the Engineer the final statement as agreed. (for the purposes of these Conditions referred to as the "Final Statement").

If, following discussions between the Engineer and the Contractor and any changes to the draft final statement that may be agreed between them, it becomes evident that a dispute exists; the Engineer shall deliver to the Employer an Interim Payment Certificate for those parts of the draft final statement, if any, that are not in dispute. The dispute shall then be settled in accordance with Clause 67. The Final Statement shall be the agreed upon settlement of the dispute."

60.14 - PAYMENT AND DISCHARGE

On or before the submission of the Final Statement, the Contractor shall give to the Employer,

SISP (USAID) Southern Sudan

For the Government of Southern Sudan

Sub-Nimule Road - P.O. Box 10000 653000
Southern Sudan

4th Sector

Conditions of Exchange: ~~for~~ ~~for~~ ~~for~~

with a copy to the Engineer, a written discharge confirming that ~~the final~~ the Final Statement represents full and final settlement of all monies due to the Contractor arising out of or in respect of the Contract and that all subcontractors, vendors and material suppliers have been paid in full. Provided that such discharge shall become effective only after payment due under the Final Payment Certificate issued pursuant to Sub-Clause 60.13 has been made and the performance security referred to in Sub-Clause 10.1 has been returned to the Contractor."

5.1.15 SUB-CLAUSE 60.15 - FINAL PAYMENT CERTIFICATE

"Within 28 calendar days after receipt of the Final Statement, and the written discharge, the Engineer shall deliver to the Employer (with a copy to the Contractor) a Final Payment Certificate stating:

(a) the amount that, in the opinion of the Engineer, is finally due under the Contract or otherwise, and

(b) after giving credit to the Employer for all amounts previously paid by the Employer and for all sums to which the Employer is entitled, other than under Clause 47, the balance, if any, due from the Employer to the Contractor or from the Contractor to the Employer as the case may be."

Sub-Clause 60.16 - CESSATION OF EMPLOYER'S LIABILITY

"The Employer shall not be liable to the Contractor for any matter or thing arising out of or in connection with the Contract or execution of the Works, unless the Contractor shall have included a claim in respect thereof in his Final Statement and (except in respect of matters or things arising after the issue of the Taking-Over Certificate in respect of the whole of the Works) in the Statement at Completion referred to in Sub-Clause 60.12."

REMEDIES

Sub-Clause 63.1 - Default of Contractor

Delete the last paragraph of Sub-Clause 63.1 following "(e) has contravened Sub-Clause 4.1," and replace it with the following:

SUB-CLAUSE 63.2 - VALUATION AT DATE OF EXPULSION

Modify the heading of Sub-Clause 63.2 by replacing it with "Valuation at Date of Expulsion" for "Valuation at Date of Termination".

In Sub-Clause 63.2, delete the word "termination" on the second and fifth lines and

Conditions of Particular Application - Page 68 of 81

Juba-Nimule Road - Package 1: (0+000-55+000) Southern Sudan	Section Conditions of Particular Application
--	---

substitute "expulsion."

SUB-CLAUSE 63.3 - PAYMENT AFTER EXPULSION

Modify the heading of Sub-Clause 63.3 by replacing it with "Payment after Expulsion" for "Payment after Termination."

In Sub-Clause 63.3, delete the words "terminates the Contractor's employment" on the first line and substitute "shall enter and expel the Contractor."

SUB-CLAUSE 63.4 - ASSIGNMENT OF BENEFIT OF AGREEMENT

In Sub-Clause 63.4, delete the word "termination" on the second line, and substitute "expulsion."

SUB-CLAUSE 63.5 - CORRUPT OR FRAUDULENT PRACTICES

Add the following Sub-Clause 63.5:

"If in the judgment of the Employer the Contractor has engaged in corrupt or fraudulent practices, in competing for or in executing the Contract, then the Employer may, after having given 14 days' notice to the Contractor, terminate the Contractor's employment under the Contract and expel him from the Site, and the provisions of Clause 63 shall apply as if such expulsion had been made under Sub-Clause 63.1."

SPECIAL RISKS

SUB-CLAUSE 65.2 - SPECIAL RISKS

Delete the text of Sub-Clause 65.2 in its entirety and replace it with the following:

"The Special Risks are the risks defined under paragraph (a), subparagraphs (i) to (v), paragraph (b), paragraph (c) and paragraph (d), subparagraphs (i) and (ii) of Sub-Clause 20.4."

SUB-CLAUSE 65.8 - PAYMENT IF CONTRACT TERMINATED

Delete the text of Sub-Clause 65.8 in its entirety and replace it with the following:

"If the contract is terminated under the provisions of Sub-Clause 65.6 or 69.3 or 73.1:

(a) The Contractor and the Employer shall agree upon the whole or any part of the amounts to be paid to the Contractor by the Employer because of the termination of work, which amounts, exclusive of profit on materials and labour, shall not exceed the amounts shown in paragraph (b)(3) of this clause, exclusive of costs shown in paragraph (b)(3) of this clause, may not exceed the total contract price as reduced by (1) the amount of payments previously made and (2) the contract price of work not terminated. The contract shall be modified, and the Contractor paid the agreed amount. Paragraph (b) of this clause shall not limit, restrict, or affect the amount that may be agreed upon to be paid under this paragraph.

(b) If the Contractor and the Employer fail to agree on the whole amount to be paid because of the termination of work, the Employer shall pay the Contractor the amounts determined by the Employer as follows, but without duplication of any amounts agreed on under paragraph (a) of this clause:

Juba-Nimule Road - Package No. 000-55400
Southern SudanSection
Conditions of Particular Application

(1) The contract price for completed supplies or services accepted by the Employer (or sold or acquired under paragraphs (f) and (i) of Clause 73.1) not previously paid for, adjusted for any saving of freight and other charges.

(2) The total of:

(i) The costs incurred in the performance of the work terminated, including initial costs and preparatory expense allocable thereto, but excluding any costs attributable to supplies or services paid or to be paid under paragraph (b)(1) of this clause;

(ii) The cost of settling and paying termination settlement proposals under terminated subcontracts that are properly chargeable to the terminated portion of the contract if not included in subdivision (b)(2)(i) of this clause; and

(iii) A sum, as profit on subdivision (b)(2)(i) of this clause, determined by the Employer under 49.202 of the Federal Acquisition Regulation, in effect on the date of this contract, to be fair and reasonable; however, if it appears that the Contractor would have sustained a loss on the entire contract had it been completed, the Employer shall allow no profit under this subdivision (b)(2)(iii) and shall reduce the settlement to reflect the indicated rate of loss.

(3) The reasonable costs of settlement of the work terminated, including-

(i) Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of termination settlement proposals and supporting data;

(ii) The termination and settlement of subcontracts (excluding the amounts of such settlements); and

(iii) Storage, transportation, and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory.

(c) Except for normal spoilage, and except to the extent that the Employer expressly assumed the risk of loss, the Employer shall exclude from the amounts payable to the Contractor under paragraph (b) of this clause, the fair value, as determined by the Employer, of property that is destroyed, lost, stolen, or damaged so as to become undeliverable to the Employer or

so as to become undeliverable to the Contractor under the Federal Acquisition Regulation, in effect on the date of this contract, to govern all costs claimed, agreed to, or determined under this clause.

(e) The Contractor shall have the right of appeal, under the Disputes clause, from any determination made by the Employer under this clause, except that if the Contractor failed to submit the termination settlement proposal or request for equitable adjustment within the time provided and failed to request a time extension, there is no right of appeal.

(f) In arriving at the amount due the Contractor under this clause, there shall be deducted;

SOP (USAID) Southern Sudan

Conditions of Particular Application

Juba-Nimule Road - Package 1: (0+000-55+000)
 Southern Sudan

Section
 Conditions of Particular Application

- (1) All un-liquidated advance or other payments to the Contractor under the terminated portion of this contract;
- (2) Any claim which the Employer has against the Contractor under this contract; and
- (3) The agreed price for, or the proceeds of sale of, materials, supplies, or other things acquired by the Contractor or sold under the provisions of this clause and not recovered by or credited to the Employer.
- (g) If the termination is partial, the Contractor may file a proposal with the Employer for an equitable adjustment of the price(s) of the continued portion of the contract. The Employer shall make any equitable adjustment agreed upon. Any proposal by the Contractor for an equitable adjustment under this clause shall be requested within 90 calendar days from the effective date of termination unless extended in writing by the Employer.
- (h) The Employer may, under the terms and conditions it prescribes, make partial payments and payments against costs incurred by the Contractor for the terminated portion of the contract, if the Employer believes the total of these payments will not exceed the amount to which the Contractor will be entitled.
- (i) If the total payments exceed the amount finally determined to be due, the Contractor shall repay the excess to the Employer upon demand, together with interest computed at the rate established by the Secretary of the Treasury under 50 U.S.C. App. 1215(b)(2). Interest shall be computed for the period from the date the excess payment is received by the Contractor to the date the excess is repaid. Interest shall not be charged on any excess payment due to a reduction in the Contractor's termination settlement proposal because of retention or other disposition of termination inventory until 10 calendar days after the date of the retention or disposition, or a later date determined by the Employer because of the circumstances.
- (j) Unless otherwise provided in this contract or by statute, the Contractor shall maintain all records and documents relating to the terminated portion of this contract for 3 years after final settlement. This includes all books and other evidence bearing on the Contractor's costs and expenses of the terminated portion of the contract. The Employer shall have these records and documents available to the Employer, at the Contractor's office, at all reasonable times, without any direct charge. If approved by the Employer, photographs, microphotographs, or other authentic reproductions may be maintained instead of original records and documents."

SUB-CLAUSE 66.2 - SUSPENSION OF FINANCIAL ASSISTANCE BY USAID

Add the following Sub-Clause 66.2:

"In the event the USAID suspends the financial assistance from which part of the payments to the Contractor are being made:

- (a) the Employer shall notify the Contractor, with copy to the Engineer, of such suspension within 7 calendar days of having received the suspension notice from the USAID provided:

that the Employer shall state in such notification whether sufficient funds in

Amber
 E&I

SISP (USAID) Southern Sudan

Conditions of Particular Application - Page 71 of 81

Juba-Nimule Road - P.O. Box 10700055 (0900)
Southern Sudan

Conditions of Particular importance

appropriate currencies are expected to be available to the Employer to continue making payments to the Contractor beyond a date 60 calendar days after the date of USAID notification of the suspension, and

that, if such funds are not expected to be available, the Employer shall immediately instruct the Engineer to instruct the Contractor to suspend the execution of the Works pursuant to Clause 40.

(b) If the Contractor has not received sums due to him upon the expiration of the 28 calendar days referred to in Sub-Clause 60.2 for payments under Interim Payment Certificates, the Contractor may without prejudice to his entitlement to interest under Sub-Clause 60.8 immediately take one or both of the following actions, namely:

- (i) suspend work or reduce the rate of work, and/or,
- (ii) terminate his employment under the Subcontract by giving notice to the Employer, with a copy to the Engineer. Such termination to take effect 14 calendar days after the giving of notice."

SETTLEMENT OF DISPUTES

Sub-Clause 67.3 – Arbitration

Delete the text of Sub-Clause 67.3 in its entirety and replace it with the following:

"Any dispute in respect of which:

- (a) the decision, if any, of the Engineer has not become final and binding pursuant to Sub-Clause 67.1, and
- (b) amicable settlement has not been reached within the period stated in Sub-Clause 67.2.

shall be finally settled under the rules of the American Arbitration Association. Arbitration proceedings shall be in English and be held in Morristown, New Jersey, U.S.A. or such other place as is mutually acceptable to both parties. The award of arbitration shall be final and binding upon the Parties for the dispute. The Parties to the dispute shall treat the enforcement of the arbitration award as an obligation under this Contract, and shall enforce such award without any delay. Each party shall bear equally the expenses of the arbitration, unless decided otherwise in the arbitration award. Arbitration may be commenced prior to or after completion of the Works, provided that the obligations of the Employer, the Engineer and the Contractor shall not be altered by reason of the arbitration being conducted during the progress of the Works.

NOT

SUB

For the purposes of this sub-clause, the addresses are those specified in the Appendix to Bid.

DEFAULT OF EMPLOYER

Sub-Clause 69.1 - Default of Employer

In Sub-Clause 69.1, substitute "Sub-Clause 60.8" for "Sub-Clause 60.10";
and

Juba-Nimule Road - Package 1: (0+000-55+000)
Southern Sudan

Section
Conditions of Particular Application

delete section (d) in its entirety.

SUB-CLAUSE 69.3 - PAYMENT ON TERMINATION

Delete the text of Sub-Clause 69.3 in its entirety and replace it with the following:

"In the event of such termination, the Contractor shall be paid by the Employer in accordance with the provisions of Sub-Clause 65.8."

SUB-CLAUSE 69.4 - CONTRACTOR'S ENTITLEMENT TO SUSPENDED WORK

In Sub-Clause 69.4, substitute "Sub-Clause 60.8" for "Sub-Clause 60.10";

SUB-CLAUSE 69.5 - RESUMPTION OF WORK

In Sub-Clause 69.5, substitute "Sub-Clause 60.8" for "Sub-Clause 60.10."

CHANGES IN COST AND LEGISLATION

CLAUSE 70 - CHANGES IN COST AND LEGISLATION

Delete Clause 70 in its entirety, including Sub-Clauses 70.1 and 70.2 and replace with the following text:

"There is no provision for price escalation in this Contract."

CURRENCY AND RATES OF EXCHANGE

CLAUSE 71.1 - CURRENCY RESTRICTIONS

Delete Sub-Clause 71.1 in its entirety

SUB-CLAUSE 72.1 - RATES OF EXCHANGE

Delete Sub-Clause 72.1 in its entirety.

SUB-CLAUSE 72.2 - CURRENCY PROPORTIONS

Delete Sub-Clause 72.2 in its entirety.

SUB-CLAUSE 72.3 - CURRENCY OF PAYMENTS FOR PROVISIONAL SUMS

Delete Sub-Clause 72.3 in its entirety.

EMPLOYERS ENTITLEMENT TO TERMINATE

SUB-CLAUSE 73.1 - EMPLOYERS ENTITLEMENT TO TERMINATE

Add the following Sub-Clause 73.1:

"The Employer may terminate performance of work under this contract in whole or, from time to time, in part if the Employer determines that a termination is in the Employer's interest. The Employer shall terminate by delivering to the Contractor with a copy to the Engineer, a Notice of Termination specifying the extent of termination and the effective date. The Employer will return the Performance Security to the Contractor.

In the event of such termination, the Contractor shall immediately proceed with the following obligations, regardless of any delay in determining or adjusting any amounts due under this clause:

(a) Stop work as specified in the notice.

(b) Place no further subcontracts or orders (referred to as subcontracts in this clause) for materials, services, or facilities, except as necessary to

Juba-Nimule Road - Package # 10000055+000
 Southern Sudan

Section
Conditions of Particular Application

complete the continued portion of the contract.

- (c) Terminate all subcontracts to the extent they relate to the work terminated.
- (d) Assign to the Employer, as directed by the Employer, all right, title, and interest of the Contractor under the subcontracts terminated, in which case the Employer shall have the right to settle or to pay any termination settlement proposal arising out of those terminations.
- (e) With approval or ratification to the extent required by the Employer, settle all outstanding liabilities and termination settlement proposals arising from the termination of subcontracts; the approval or ratification will be final for purposes of this clause.
- (f) As directed by the Employer, transfer title and deliver to the Employer:
 - (i) The fabricated or un-fabricated parts, work in process, completed work, supplies, and other material produced or acquired for the work terminated; and
 - (ii) The completed or partially completed plans, drawings, information, and other property that, if the contract had been completed, would be required to be furnished to the Employer.
- (g) Complete performance of the work not terminated.
- (h) Take any action that may be necessary, or that the Employer may direct, for the protection and preservation of the property related to this contract that is in the possession of the Contractor and in which the Employer has or may acquire an interest.
- (i) Use its best efforts to sell, as directed or authorized by the Employer, any property of the types referred to in paragraph (f)(i) of this clause; provided, however, that the Contractor (i) is not required to extend credit to any purchaser and (ii) may acquire the property under the conditions prescribed by, and at prices approved by, the Employer. The proceeds of any transfer or disposition will be applied to reduce any payments to be made by the Employer under this contract, credited to the price or cost of the work, or paid in any other manner directed by the Employer.
- (j) The Contractor shall submit complete termination inventory schedules no later than 120 calendar days from the effective date of termination, unless extended in writing by the Employer upon written request of the Contractor within this 120-day period.
- (k) Within 15 calendar days of the final clearance period, the Contractor may submit a list, certified as to quantity and quality, of items previously disposed of, excluding items authorized for disposition by the Employer. The Contractor may request the Employer to remove those items or enter into an agreement for their storage. Within 15 calendar days, the Employer will accept title to those items and remove them or enter into a storage agreement. The Employer may verify the list upon removal of the items, or if stored, within 45 calendar days from submission of the list, and shall correct the list, as necessary, before final settlement.
- (l) After termination, the Contractor shall submit a final termination settlement proposal to the Employer in the form and with the

Juba-Nimule Road - Package 1: (0+000-55+000)
 Southern Sudan

Section
 Conditions of Particular Application

certification prescribed by the Employer. The Contractor shall submit the proposal promptly, but no later than 1 year from the effective date of termination, unless extended in writing by the Employer upon written request of the Contractor within this 1-year period. However, if the Employer determines that the facts justify it, a termination settlement proposal may be received and acted on after 1 year or any extension. If the Contractor fails to submit the proposal within the time allowed, the Employer may determine, on the basis of information available, the amount, if any, due the Contractor because of the termination and shall pay the amount determined.

(m) Remove its entire staff and labour from the Site.

In the event of such termination, the Contractor shall be paid by the Employer in accordance with the provisions of Sub-Clause 65.8.

AUDIT AND RECORDS

SUB-CLAUSE 74.1 - AUDIT AND RECORDS

Add the following Sub-Clause 74.1:

- (a) "As" used in this clause, 'records' includes books, documents, accounting procedures and practices, and other data, regardless of type and regardless of whether such items are in written form, in the form of computer data, or in any other form.
- (b) Examination of costs: If this is a cost-reimbursement, incentive, time-and-materials, labour-hour, or unit price determinable contract, or any combination of these, the Contractor shall maintain and Employer shall have the right to examine and audit all records and other evidence sufficient to reflect properly all costs claimed to have been incurred or anticipated directly or indirectly in performance of this contract. This right of examination shall include inspection at all reasonable times of the:
- (c) Contractor's plants, or parts of them, engaged in performing the contract.
- (d) Cost or pricing data: If the Contractor has been required to submit cost or pricing data in connection with any pricing action relating to this contract, Employer, in order to evaluate the accuracy, completeness, and currency of the cost or pricing data, shall have the right to examine and audit all of the Contractor's records, including computations and projections, related to:
 - (vi) the proposal for the contract, subcontract, or modifications;
 - (vii) the discussions conducted on the proposal(s), including those related to negotiating;
 - (viii) pricing of the contract, subcontract, or modification; or
 - (ix) performance of the contract, subcontract or modification.
- (e) Reports: If the Contractor is required to furnish cost, funding, or performance reports, Employer shall have the right to examine and audit the supporting records and materials, for the purpose of evaluating:
 - (i) The effectiveness of the Contractor's policies and procedures

Juba-Nimule Road - Package 11 (USAID/SS/000)

Southern Sudan

Section
Conditions of Particular Application

to produce data compatible with the objectives of these reports and

(ii) The data reported.

(f) Availability: The Contractor shall make available at its local/home country office at all reasonable times records materials and other evidence described in paragraph (a), (b), (c), (d), and (e) of this clause, for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in subpart 4.7, Contractor records retention, of the Federal Acquisition Regulation (FAR), or for any longer period required by U.S. statute by other clauses of this contract. In addition:

(i) if this contract is completely or partially terminated, the Contractor shall make available the records relating to the work terminated until 3 years after any resulting final termination settlement; and

(ii) the Contractor shall make available records relating to appeals under the disputes clause or to litigation or the settlement of claims arising under or relating to this contract shall be made available until such appeals, litigation, or claims are finally resolved.

(g) The Contractor shall insert a clause containing all the terms of this clause, including this paragraph (g), in all lower tier subcontracts under this contract:

- (i) that is cost-reimbursement, incentive, time-and-materials, labor-hour, or price terminable type or any combination of these;
- (ii) for which cost or pricing data are required; or
- (iii) that requires the Contractor to furnish report as discussed in paragraph (e) of this clause.

The sub clause (g) may be altered only as necessary to identify properly the contracting parties and the Contracting Officer of USAID under the Government prime contract. USAID or its authorized representative shall have access to the records of the Contractor and any Subcontractor with respect to:

- (i) its quality inspection and assurance procedures and records;
- (ii) its supporting records and materials pertaining to cost, funding or performance reports that have been made by the

Contractor to the Employer or to any other party in accordance with any agreement, including any agreement for partial performance of the contract or agreement.

SUB-CLAUSE 74.2 - AUDITS AND RECORDS, FAR CLAUSE 52.215-2

Add the following Sub-Clause 74.2:

"By reference herein, FAR clause 52.215-2 "Audit and Records - Negotiation" is incorporated in the contract. In accordance with the requirements of this clause, flow-down of its terms by the Employer to its Contractors and their Subcontracts under certain circumstances is required.

In addition, the Employer is required to include in its contracts and subcontracts and orders applicable to and funded through the Works; and even if such contracts,

Juba-Nimule Road - Package 1: (0+000-55+000)
 Southern Sudan

Section -
 Conditions of Particular Application

subcontracts/orders may be fixed-priced, the right of The Comptroller General of the United States or its authorized representatives to have access to the records of the Contractor with respect to:

- (a) Its quality inspection and assurance procedures and records;
- (b) Its supporting records and materials pertaining to cost, funding or performance reports that are required by the subcontract/order; and
- (c) Its supporting records and materials pertaining to any requests for advance payments or other requests for partial payment for work under the subcontract or order."

CLAUSES INCORPORATED BY REFERENCE

SUB-CLAUSE 75.1 - CLAUSES INCORPORATED BY REFERENCE

Add the following Sub-Clause 75.1:

"52.252-2 Clauses Incorporated by Reference (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Employer will make their full text available. Also, the full text of a Clause may be accessed electronically at Federal Acquisition Regulation (FAR) clauses: www.acnet.gov.

The following contract clauses pertinent to this section are hereby incorporated by reference (by Citation Number, Title, and Date) in accordance with the clause at FAR "52.252-2 Clauses Incorporated by Reference".

NUMBER	TITLE	DATE
52.203-3	GRATUITIES	APR 1984
52.203-5	COVENANT AGAINST CONTINGENT FEES	APR 1984
52.203-8	CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY	JAN 1997
52.203-10	PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY	JUL 1997
52.203-12	LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS	JUN 1997
52.203-6	RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT	JUL 1995
52.203-13	ALTERATION PROCEDURES	JUL 1995
52.203-14	CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY	JAN 1997
52.203-12	LIMITATION ON PAYMENTS TO INFLUENCE	JUN 1997
52.209-6	PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS: DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT	JUL 1995
52.215-10	PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA	OCT 1997
52.215-11	PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA - MODIFICATIONS	OCT 1997
52.215-12	SUBCONTRACTOR COST OR PRICING DATA	OCT 1997
52.215-17	WAIVER OF FACILITIES CAPITAL COST OF MONEY	OCT 1997
52.215-19	NOTIFICATION OF OWNERSHIP CHANGES	OCT 1997
52.222-3	CONVICT LABOR	AUG 1996
52.222-19	CHILD LABOR - COOPERATION WITH AUTHORITIES	DEC 2001

Juba-Nimule Road - Package 11 (00005-000)
Southern Sudan

Conditions of Particular Application

AND REMEDIES

S2.223-5	POLLUTION PREVENTION AND RIGHT-TO-KNOW	AUG
S2.225-13	RESTRICTIONS OF CERTAIN FOREIGN PURCHASES	OCT
S2.227-14	RIGHTS IN DATA-GENERAL	JUNE
S2.228-2	ADDITIONAL BOND SECURITY	OCT
S2.229-6	TAXES-FOREIGN FIXED PRICE CONTRACTS	JUNE
S2.243-1	CHANGES-FIXED-PRICE-ALTERNATE III	AUG
S2.244-6	SUBCONTRACTS FOR COMMERCIAL ITEMS AND COMMERCIAL COMPONENTS	OCT

PRE-CONSTRUCTION CONFERENCES

SUB-CLAUSE 76.1 - PRE-CONSTRUCTION CONFERENCES

Add the following Sub-Clause 76.1:

"The Employer shall conduct pre-construction conferences with the Contractor, its agents, local personnel, local authorities and inspectors and other involved parties to acquaint personnel, local authorities and inspectors and other involved parties with the procedures, lines of authority and the interrelationship with the monitoring activities of the Employer, USAID and others. These conferences shall take place shortly after the Contract Agreement is executed."

awB

SISP (USAID) Southern Sudan

Conditions of Particular Application - Page 35

SECTION VI

THE CONDITIONS OF

CONTRACT PART I, GENERAL

CONDITIONS

Juba-Nimule Road - Package 1: (km 55+000 - 125+000)
Southern Sudan

Section.
General Conditions

CONDITIONS OF CONTRACT PART I: GENERAL CONDITIONS

The Conditions of Contract, Part I: General Conditions shall be those forming Part I of the "Conditions of Contract for Works of Civil Engineering Construction," fourth edition 1987, reprinted in 1992, with further amendments, prepared by the *Fédération Internationale des Ingénieurs-Conseils* (FIDIC). These Conditions are subject to the variations and additions set out in Part II hereof entitled "Conditions of Particular Application."

Copies of the FIDIC Conditions of Contract can be obtained from:

FIDIC Secretariat
P.O. Box 86
1000 Lausanne 12
Switzerland
Facsimile: 41 21 653 5432
Telephone: 41 21 653 5003

or from the FIDIC book shop on the Web at:
www1.fidic.org/bookshop/

AW
The Louis Berger Group, Inc.
General Contractor
International Programs

SISP (USAID) Southern Sudan

General Conditions - 1 of 1

SECTION VII

THE AMENDMENTS TO THE SPECIFICATIONS

Juba-Nimule Road - Package 1: (km 000018.55+000)
Southern Sudan

Section
Technical Specifications

AMENDMENTS TO TECHNICAL SPECIFICATIONS

TABLE OF CONTENTS

<u>SERIES/DIVISION</u>	<u>PAGE</u>
"SERIES 900 - DESIGN SERVICES, REFERENCE MANUALS AND LAB EQUIPMENT	
DIVISION 910 - DESIGN SERVICES	
911 DESIGN	ERROR! BOOKMARK NOT DEFINED
912 MEASUREMENT AND PAYMENT	ERROR! BOOKMARK NOT DEFINED
DIVISION 920 - REFERENCE MANUALS	
921 REFERENCE MANUALS	
922 MEASUREMENT AND PAYMENT	
DIVISION 930 - LAB EQUIPMENT	
931 LAB EQUIPMENT FOR THE ENGINEER	
932 MEASUREMENT AND PAYMENT	
SERIES 1000 - GENERAL	
DIVISION 1100 - TERMS AND DEFINITIONS	
1102 TERMS AND DEFINITIONS	
1103 SCOPE OF PAYMENT	
DIVISION 1200 - GENERAL REQUIREMENTS AND PROVISIONS	
1202 WORKMANSHIP AND QUALITY CONTROL	
1203 APPROVAL OF COMPLETED WORKS	
1204 SETTING OUT OF WORK AND PROTECTION OF SURVEY MONUMENTS	
1209 WATER	
1210 USE OF EXPLOSIVES AND DEMOLITION	
1211 PHOTOGRAPHIC RECORDS	
1212 MEASUREMENT: GENERAL	
1213 PAYMENT	
DIVISION 1300 - CONTRACTOR'S ESTABLISHMENT ON SITE	
DIVISION 1400 - ACCOMMODATION, SERVICES, AND ATTENDANCE FOR THE ENGINEER'S STAFF	
1401 SCOPE AND GENERAL REQUIREMENTS - OFFICE AND HOUSING ACCOMMODATION	
1402 SPECIFICATIONS (OFFICE ACCOMMODATION FOR THE ENGINEER)	
1403 SPECIFICATION (HOUSING ACCOMMODATION FOR THE ENGINEER)	
1404 SERVICES	
1405 VEHICLES	
1407 MEASUREMENT AND PAYMENT	
DIVISION 1500 - TRAFFIC MANAGEMENT	
DIVISION 1600 - ENVIRONMENTAL PROTECTION AND MITIGATION MEASURES	
1610 MEASUREMENT AND PAYMENT	
DIVISION 1700 - OVERHAUL	
"DIVISION 1800 - MOBILIZATION	
1801 DESCRIPTION	

1801 MEASUREMENT AND PAYMENT	17
1900 - SECURITY SERVICES	17
1901 SECURITY SUBCONTRACTOR	17
1902 SECURITY SITUATION IN SOUTH SUDAN	18
1903 SCOPE OF SERVICES	19
1904 ACCOMMODATION, FOOD AND VEHICLES	32
1905 MEASUREMENT AND PAYMENT	32
SERIES 4000 - EARTHWORKS	33
DIVISION 4100 PREPARATION OF ROAD BED AND PROTECTION OF EARTHWORKS	34
4103 TREATMENT OF THE EXISTING GROUND AND OF THE ROAD BED MATERIALS IN CUT	34
DIVISION 4200 ROADWAY AND BORROW EXCAVATION	34
4204 CLASSES OF EXCAVATION	34
4207 CONSTRUCTION REQUIREMENTS FOR THE EXCAVATION OF CUTTINGS	34
4208 MEASUREMENT AND PAYMENT	34
DIVISION 4300 BORROW MATERIALS	34
4307 MEASUREMENT AND PAYMENT	34
DIVISION 4400 - EMBANKMENT CONSTRUCTION	35
4405 CONSTRUCTION REQUIREMENTS FOR EMBANKMENTS	35
4406 MEASUREMENT AND PAYMENT	35
DIVISION 4600 - STABILIZATION	37
4603 CHEMICAL STABILIZATION	37
SERIES 5000 - SUBBASE, ROAD BASE AND GRAVEL WEARING COURSE	38
DIVISION 5100 - SUB-BASES	38
5107 CONSTRUCTION REQUIREMENTS	38
DIVISION 5200 - ROAD BASES	38
5205 MATERIAL REQUIREMENTS FOR NATURALLY OCCURRING GRANULAR MATERIALS, BOULDERS, WEATHERED ROCK	38
5206 MATERIAL REQUIREMENTS FOR DENSE BITUMEN MACADAM	38
5207 MATERIAL REQUIREMENTS FOR MIXED BITUMEN MACADAM	38
5209 CONSTRUCTION REQUIREMENTS FOR CRUSHED GRAVEL ROAD BASE	38
5210 CONSTRUCTION REQUIREMENTS FOR DENSE BITUMEN MACADAM ROAD BASE	38
5211 CONSTRUCTION TOLERANCES	38
5212 CONSTRUCTION REQUIREMENTS FOR DENSE BITUMEN MACADAM	39
5213 CONSTRUCTION REQUIREMENTS FOR CRUSHED GRAVEL ROAD BASE	39
SERIES 6000 - BITUMINOUS SURFACINGS AND ROAD BASES	39
DIVISION 6100 - BITUMINOUS PRIME COAT	39
6103 MEASUREMENT AND PAYMENT	39
DIVISION 6300A - SURFACE TREATMENTS: MATERIALS AND GENERAL REQUIREMENTS	39
63A02 MATERIALS	39
DIVISION 6300D - TRIPLE SEAL SURFACE TREATMENT	39
DIVISION 6300E - SINGLE SURFACE TREATMENT WITH SLURRY (CAPE SEAL)	39
DIVISION 6400 - BITUMINOUS ROADBASES AND SURFACINGS	39

Juba-Nimule Road - Package 3r (Km 0+000 to 55+000)		Section Technical Specifications
DIVISION 6700 - SURFACING OF BRIDGE DECKS	39	
DIVISION 6800 - TREATMENT OF CERTAIN DEFECTS IN EXISTING BITUMINOUS SURFACING	39	
DIVISION 6900 - BITUMINOUS ROAD-MIX SURFACING	39	
SERIES 7000 - RIGID PAVEMENTS	40	
DIVISION 7100 - RIGID (CONCRETE) PAVEMENT	40	
7102 MATERIAL FOR CONCRETE	40	
SERIES 8000 - STRUCTURES	40	
DIVISION 8100 - FOUNDATIONS FOR STRUCTURES	40	
8102 MATERIALS	40	
8113 FOUNDATION PILING	40	
8114 CAISONS	40	
8115 MEASUREMENT AND PAYMENT	40	
Division 8600 - PRESTRESSING	40	
Division 8700 - BRIDGE BEARINGS... PARAPHRAPS, RAILINGS, SIDEWALKS, NO-FINES CONCRETE, WATER PROOFING AND DRAINAGE FOR STRUCTURES	40	
8702 BRIDGE BEARINGS	40	
8703 BRIDGE PARAPHRAPS, RAILINGS AND SIDEWALKS	40	
8707 MEASUREMENT AND PAYMENT	40	
Division 8800 - STRUCTURAL STEEL WORK	40	
Division 8800 - CONSTRUCTION TOLERANCES FOR STRUCTURES	40	
T8003 TOLERANCES	40	ERROR! BOOKMARK NOT DEFINED.
SERIES 9000 - ANCILLARY WORKS	41	
Division 9400 - ROAD SIGNS	41	
9409 MEASUREMENT AND PAYMENT	41	
Division 9700 - PAINTING OF STEEL	41	
SERIES 10000 - TESTING MATERIALS AND WORKMANSHIP	41	
SECTION 10100 - STANDARD AND TESTING	41	
10109 TESTING TAR, BITUMEN AND ASPHALT	41	
10111 TESTS ON PAVEMENTS	41	
10112 STRUCTURAL TESTS	41	
10113 TESTS ON SILICONE SEALANTS	41	
10114 TESTS ON GEOTEXTILES AND GEOTEXTILE-SOIL COMPATIBILITY TESTS	41	
10117 MEASUREMENT AND PAYMENT	41	
SECTION 10200 - QUALITY CONTROL (SCHEME 1)	41	
10212 MEASUREMENT AND PAYMENT	42	
SECTION 10300 - QUALITY CONTROL (SCHEME 2)	42	
10305 PROCEDURES	42	
10310 MEASUREMENT AND PAYMENT	42	

Juba-Nimule Road - Package 1: (km 0+000 to km 55+000)
Southern Sudan

Section
Technical Specifications

Add the following new Series 900 -Reference Manuals and Lab Equipment

"SERIES 900 -REFERENCE MANUALS AND LAB EQUIPMENT

DIVISION 920 - REFERENCE MANUALS

921 REFERENCE MANUALS

The Contractor shall provide the following Reference Manuals to the Engineer. All reference manuals shall be the latest edition, in English and be original publications. CD copies as required shall be original releases:

- ASTM (American Society of Testing and Materials) - ASTM Standards in Building Codes - 4 book set and CD ROM
- AASHTO (American Association of State Highway and Transportation Officials) - Standard Specifications for Transportation Materials and Methods of Sampling and Testing - 4 book set, Part I, Specifications and Part II, Tests and CD ROM.
- ACI (American Concrete Institute) - Complete 6 Volume Set and CD ROM.
- Asphalt Institute (American Asphalt Institute)-Manual series MS-1 through MS-8, MS-10 through MS-12, MS-14 through MS-23.
- AASHTO Geometric Design of Roads Manual.
- Ministry of Transport and Roads, Government of Southern Sudan (GOSS) Road Design Manual.

922 MEASUREMENT AND PAYMENT

The purchase and supply of Reference Manuals and CDs as required by this Specification division shall not be measured for payment but paid as a lump sum.

Payment of the Lump Sum amount for the purchase and supply of Reference Manuals and CDs as required by this Specification division shall be after receipt by the Engineer of all manuals and CDs required under this Specification division.

DIVISION 930 - LAB EQUIPMENT

931 LAB EQUIPMENT FOR THE ENGINEER

The Contractor shall provide the following brand new Lab Equipment to the Engineer within 120 days from the notice to commence. The Contractor shall also provide maintenance services for this lab equipment and Laboratory with no extra cost to the Contractor.

The laboratory shall consist of a floor area of min 30m². Air conditioned, and serviced with water, electricity supply and drainage with adequate benches and a sink unit, with a painted concrete floor.

The Laboratory may be attached adjacent to the contractor's laboratory or as a separate unit, but should have separate and secure access.

Juba-Nimule Road - Package 1: (km 0+000 to km 55+000)
Southern SudanSection 1
Technical Specifications

Engineers Laboratory Lab Equipment

Item	Number Required	Description of de Equipment	Remarks
1	1	Drying Oven 225 liter capacity	
2	2	900 x 900mm Quartering tray	
3	1	75mm slot size riffle box	
4	1	6mm slot size riffle box	
5	1	Quartering Iron 900mm	
6	20	Sample trays 400 x 400 x 75 mm	
7	1	Digital Scales 0.001g to 51grms	
8	1	Digital Scales 30kg to 0.1g	
9	1	Pressure Filter	
10	1	Stainless Steel 200mm Diameter funnel	
11	1	Pressure Filter Pump 240v for filter above	
12	10	Whatman 5 Filter papers x 100	
13	1	Automatic Cone Penetrometer BS 1377	
14	2	cone for above	
15	5	Penetration Cups	
16	1	Penetration test Gauge	
17	1	Glass Plate 500ml x 500ml	
18	50	Penetration test cups for M/C	
19	3	Plastic Wash Bottles 250ml	
20	2	Spatula 200mm	
21	2	Spatula 100mm	
22	2	Spatula	
23	1	Casagrande Liquid limit apparatus (manual)	
24	1	Grooving tool	
25	1	Single grooving tool	
26	1	75mm Stainless steel sq app test sieve	300mm Diameter
27	1	50mm	
28	1	37.5mm	
29	1	28.0mm	
30	1	25.0mm	
31	2	20.0mm	
32	1	14.0mm	
33	1	13.2mm	
34	1	10.0mm	
35	1	6.7mm	
36	1	6.3mm	
37	1	5.0mm	
38	1	3.35mm	
39	2	Lids	

1002 Nimida Road - Package 15
Southern Sudan

Technical Specifications

40	2	Pans	
41	1	2.36mm	200mm diameter
42	1	1.18mm	
43	1	600um	
44	3	425um	
45	1	300um	200mm diameter
46	1	212um	
47	1	150um	
48	4	75um	200mm diameter
49	4	63um	
50	2	Lids	
51	2	Pans	
52	4	75um test sieves	300mm diameter
53	1	CBR Motorized Load Frame, BS & ASTM 240v	
54	1	Dial Gauge 25mm travel x 0.01mm	
55	1	Proving Ring and Deflection Gauge	
56	1	Vibrating "Kango" Compaction Hammer 240v	
57	4	square 100x100mm cast feet	
58	4	Steel shafts for feet	
59	10	Industrial roll packs of Cling Film	
60	1	Flakiness Gauge	
61	1	Elongation Gauge	
62	1	set of ACV test equipment	
63	6	2 litre Gas Jars with Ground Glass lids and Rubber Bungs	
64	6	CBR swell plates	
65	6	CBR Tripods	
66	6	Dial indicators	
67	8	300mm x300mm aluminum rate of spread trays	
68	1	set of cork/rubber bung cutters	
69	1	Vacuum pump 240v	
70	1	Digital Thermometer	

71	24	150 x150x150mm steel cube moulds	
72	1	2000kN 220-240V 50 Hz single phase Semi Automatic Compression Testing Machine . distance pieces and Platen suitable to crush 150mm X 150mm x 150mm Test cubes. Platen guide for positive centering for crushing of 150mm cubes.	
73	3	600x600x70mm galvanized sample trays.	
74	1	Vernier Gauge	

Juba-Nimule Road - Package 1: (km 0+000 to km 55+000)
 Southern Sudan

Section
 Technical Specifications

75	1	Modified Compaction Rammer 4.5Kg	
76	1	Standard Compaction Rammer 2.5Kg	
77	1	Standard Proctor Mould	
78	12	CBR Moulds with Perforated Base Plates, and Collars	

79	1	Straight Edge 3 x 300 x 30mm	
80	2	Modified Proctor Mould 2124cm ³	
81	6	Split surcharge weights, 2kg	
82	1	850 watt microwave oven	
83	1	Solid Plate for CBR Mould Base	
84	1	Universal Proctor/CBR/Marshall Extruder	
85	2	CBR Mould "C" Spanners	
86	1	Straight edge Spanner for Removal of CBR base plates	
87	1	CBR mould compaction plug with handle	
88	2	Steel rule 300mm	
89	2	Graduated Plastic Cylinders 1000ml	
90	2	Graduated Plastic Cylinders 2000ml	
91	2	Pyrex glass dish 1000ml	
92	1	Mechanical Sieve shaker for up to 300mm diameter sieves	
93	1	1000litre Concrete Specimen Curing Tank, with heating element and submersible circulator pump	
94	1	Porcelain Mortar 125mm diameter	
95	1	Rubber headed pestle	
96	2	500ml aluminium scoops	
97	2	1000ml aluminium scoops	

Wimble Road - Package 1: (511) 270-5700
Miss Sudan

Technical Specifications.

932 MEASUREMENT AND PAYMENT

Providing and Maintenance of Lab. Equipment for the Engineer's use as required by this Specification division shall not be measured for payment but paid as a lump sum per month.

SERIES 1000 - GENERAL

DIVISION 1100 - TERMS AND DEFINITIONS

1102 TERMS AND DEFINITIONS

1103 SCOPE OF PAYMENT

Add the following new Sub-Division 1103:

**Payment for all contract work is provided, either directly or indirectly, under the pay items shown in the bid schedule.*

(a) **Direct payment:** Payment is provided directly under a pay item shown in the bid schedule when one of the following applies:

- (1) The work is measured in the Measurement and Payment Subdivision of the Division ordering the work, and the bid schedule contains a pay item for the work from the Division ordering the work.
- (2) The Measurement and Payment Subdivision, of the Division ordering the work, references another Division for measuring the work and the bid schedule contains a pay item for the work from the referenced Division.

(b) **Indirect payment:** Work for which direct payment is not provided is a subsidiary obligation of the Contractor. Payment for such work is indirectly included under other pay items shown in the bid schedule. This includes instances when the Division ordering the work references another Division for performing the work and the work is not referenced in the Measurement and Payment subdivision of the Division ordering the work and/or when it is specifically stated in the Specifications that a specific work item or a Division or subdivision is a subsidiary obligation of the Contractor."

Compensation provided by the pay items included in the contract bid schedule is full payment for performing all contract work in a complete and acceptable manner. All risk, loss, damage, or expense arising out of the nature or prosecution of the work is included in the compensation provided by the contract pay items.

Work measured and paid for less than one pay item will not be paid for under any other pay item.

quality. First pay quantities to the quantities staked, ordered, or otherwise authorized before performing the work. Payment will be made for the actual quantities of work performed and accepted or material furnished according to the contract. No payment will be made for work performed in excess of that staked, ordered, or otherwise authorized.

Division 1200 - General Requirements and Provisions

1202 WORKMANSHIP AND QUALITY CONTROL

Delete subdivision 1202 in its entirety and replace it with the following:

Juba-Nimule Road - Package 1: (km 0+000 to km 55+000)
 Southern Sudan

Section
Technical Specifications

It is the Contractor's responsibility to produce work, which conforms in quality and accuracy of dimensions to the requirements of the Specification and Drawings. The Contractor shall implement a Quality Assurance System, together with all necessary facilities, to ensure adequate supervision and positive Quality Control of the Works at all times.

Prior to the commencement of works the Contractor shall submit for approval a Quality Assurance Plan, detailing General and Work Procedures, ITP's, etc. to be implemented during each phase of the Works.

All permanent works materials to be used in the works shall be tested by the Contractor prior to being used in the works. The result shall be submitted to the Engineer, under a request for materials approval.

1203 APPROVAL OF COMPLETED WORKS

Delete "the Contractor shall submit a request and obtain" in the first line of the first paragraph and replace with "the Contractor shall submit a Request for Inspection and obtain".

1204 SETTING OUT OF WORK AND PROTECTION OF SURVEY MONUMENTS

In the third paragraph of this Sub-Division, delete the following:

"Survey monuments shall be established on steel pin set in concrete or another less permanent manner approved by the Engineer."

In the fifth paragraph of this Sub-Division, delete "shall be replaced by the Contractor so as not to disrupt the Contractor's Program" and replace with "shall be replaced by the Contractor at his own cost so as not to disrupt the Contractor's Program".

1209 WATER

Add the following paragraph at the end of Sub-Division 1209:

"Contractor is meant to drill boreholes at a minimum interval of five (05) kilometers at the required depth so as to assure a continuous supply of water for construction. The number boreholes drilled will be handed over to the communities for domestic use when the construction finishes up. The cost of the exploration, drilling and preparation for pumping shall not be subject to a separate payment, but should be in-built in pay items included in Bill of Quantities."

1210 USE OF EXPLOSIVES AND DEMOLITION

Delete the text of this Sub-Division in its entirety and replace with the following:

For breaking up rock and hard material during excavations, for demolishing existing structures and for such other purposes, the Contractor shall utilize mechanical means to avoid blasting as advised by the Engineer. Such action by the Engineer shall not entitle the Contractor to any additional payment for having to resort to other less economical methods of construction unless otherwise provided for in the Bill of Quantities.

1211 PHOTOGRAPHIC RECORDS

Delete "The Contractor shall make photographs" in the first line of the first paragraph and replace with "The Contractor shall make digital photographs".

Delete subparagraphs (ii), (iii) and (iv) and replace with the following:

"(ii) The date of the photo shall be indicated on the corner using a data-back system.

Jobs-Nimule Road - Package 12 (Km 110 to Km 55/600)
Southern Sudan

Technical Specifications

(iii) Each print shall be marked with an identification reference number, and the job title.

(iv) A list of titles indicating reference number, brief description, chainage, GPS coordinates and direction of view shall be provided with each set of prints."

Delete "and the negatives and prints shall be delivered to the Engineer within 28 days" in the last paragraph and replace with "and the prints shall be delivered to the Engineer within 7 days"

1212 MEASUREMENT: GENERAL

Delete subparagraph (b) in its entirety and replace with the following:

"The quantities set out in the Bill of Quantities are indicative quantities and are used for the comparison of Bids and awarding the Contract. It must be clearly understood that only the actual quantities of work done or materials supplied will be measured for payment, and that the quantities may be increased or decreased as provided in the General Conditions of Contract. When the Bill of Quantities is determined after completion of final design, it is expected significant fluctuations in quantities which shall not be subject to any sort of changes in the unit bided rates."

1213 PAYMENT

Delete subparagraphs (a) and (b) in its entirety and replace with the following:

"(a) Contract Rates: In computing the final contract amount as a result of final design, payments shall be based on actual quantities of approved work done in accordance with the Specifications and Drawings. The Bided rates shall apply, subject to the provisions of the General Conditions of Contract, irrespective of whether the actual quantities are more or less than the billed quantities; for this, there is not any fluctuation percentage fix to be accounted for review of bided rates.

Where no rate or price has been entered against a pay item in the bill of quantities by a Bidder, it shall be assumed that Contractor does not require any compensation for such work and deemed inbuilt in other pay item.

(b) Rates to be inclusive: The Contractor shall accept the payment provided in the Contract and represented by the prices Bided by him in the Bill of Quantities, as payment in full for executing and completing the work as specified, for procuring and furnishing all materials, labor, supervision, plant, tools and equipment, for wastage, transport, loading and unloading, handling, maintenance, temporary work, testing, quality control including process control, overheads, profit, life support for all his staff and local hired employees, security for his staff and safeguarding of his property, risk and other obligations and for all other expenses and contingencies arising from the execution of the work, and maintenance during the Defect Liability Period and the Defect Liability Period until final completion certificate is issued by the Engineer.

This Clause shall be applicable in full to all pay items. A separate interpretation of specifications, drawings or bill of quantities description will not be a cause of any additional compensation."

DIVISION 1300 - CONTRACTOR'S ESTABLISHMENT ON SITE

Delete the text of Division 1300 in its entirety and replace with the following:

Juba-Nimule Road - Package 1: (km 0+000 to km 55+000)
 Southern Sudan

Section
 Technical Specifications

"Refer to General Conditions of Contract and Conditions of Particular Application with regards to Contractor's Establishment on Site procedures and requirements. No separate payment shall be made for Contractor's Establishment on Site. Contractor's Establishment on Site shall be a subsidiary obligation of the Contractor under the Pay Item P1-1800-01 "Mobilization" of the Indicative Bill of Quantities. See subdivision 1103(b)."

DIVISION 1400 - ACCOMMODATION, SERVICES, AND ATTENDANCE FOR THE ENGINEER'S STAFF

Delete the text of Division 1400 in its entirety and replace with the following:

"1401 SCOPE AND GENERAL REQUIREMENTS - OFFICE AND HOUSING ACCOMMODATION

The Contractor shall provide office and residential accommodation for the Engineer and the Engineer's Staff at the construction site. The accommodation shall include the necessary office building, housing for the supervisory staffs, furniture, as well as the provision of all services required, using prefabricated units or porta-cabins. Unless otherwise specified, the main camp of the contractor as well as the location of the Engineer's office and housing accommodation has to be at or near the mid-length of the project. Camp sites shall be located in an area so as to minimize disruption to local population.

The Engineer's offices, and other buildings will be erected by the Contractor on the Site or on land which has been procured (bought or rented) by the Contractor adjacent to the Site for this purpose and are in a separate area but in same compound where the Contractor's offices and laboratory are established. If the Contractor should decide to move his own offices and/or laboratories to a new site, the offices, and other buildings erected for the use of the Engineer shall be rebuilt by the Contractor at the new site if required, at no additional charge. However, Contractor may not move to a different location without the consent of the Engineer.

The Contractor shall take all reasonable precautions to prevent unauthorized entry to the Engineer's offices and houses. A security fence shall be erected by the Contractor around the offices and houses for the Engineer. The layout, siting and orientation of the offices and housing accommodation shall be proposed by the Contractor and submitted to the Engineer's approval. Offices, and residential accommodation, complete with their contents, access compacted gravel roads and hard standing parking shall be ready for occupation and the use of the Engineer within 90 (ninety) days from the date of Notice to Proceed/commence unless otherwise described in the Contract. If the contractor fails to provide the offices and housing within the time frame stated herein above he shall be responsible for providing to Engineer's staff the temporary offices and housing at his own cost but equal or superior quality of that in specifications. This is without prejudicing the Engineer's right to take other contractual measures.

All offices and residential accommodation shall be regularly cleaned and maintained for so long as they are in use and suitable arrangements shall be made for the disposal of waste arising from the offices and residential accommodation.

All offices and residential accommodation equipment/furniture shall be of a quality and precision appropriate to its use and shall be delivered new to the Engineer.

When major components of the Works are manufactured off the Site, the Contractor shall arrange to make available adequate and secure accommodation at or adjacent to the place of manufacture during the period of manufacture and testing.

All the Engineer's site facilities shall be located as directed by the Engineer. The Contractor together with his Bid shall submit a proposed plan regarding the Engineer's site facilities. Water and electric supply shall be provided on 24-hour basis and the Contractor shall pay

for any statutory charges associated there with. Pure drinking water shall be supplied or made available for all the facilities.

The Contractor shall start work on the Engineer's site facilities as soon as practicable from the date of commencement of the works but same must be complete ninety (90) days of the date of Notice to Proceed/Commence. Detailed specifications and plans regarding the site facilities, including, but not limited to, their services and furnishing shall be supplied by the Contractor to the Engineer as soon as practicable from the date of commencement of the works.

Ownership of the Engineer's offices and housing accommodation including, sanitary facilities, installations, fittings, connections etc. becomes the property of the Contractor on completion of the project. Also, the ownership of the Engineer's office furniture and equipment becomes the property of the Contractor on completion of the project. The ownership of the mobile radios remains to be for the Contractor.

1402 SPECIFICATIONS (OFFICE ACCOMMODATION FOR THE ENGINEER)

(a) General

Buildings for offices shall be constructed with prefabricated units or Porta-cabins or of an approved equivalent material. The construction material to be used shall be strong, durable and of an acceptable quality. The office building shall have concrete floors with vinyl floor tiles. Alternatively, offices can be of prefabricated or portable type. The clear height of all offices between floor and ceiling shall be 2.80 m minimum. All windows shall be of the louvre type and mosquito screens that can open over the full window area. The ceilings of the buildings shall be of chip wood or any other quality approved by the Engineer.

The area for the Engineer's office shall be secured with a 1.8 m high chain link or barbed wire security fence.

Residential accommodation and Office buildings shall be painted with an approved paint after erection.

Each door shall be provided with a lock and two keys.

The various units of accommodation and fittings shall be constructed in accordance with details approved by the Engineer during erection of units.

Each hand wash basin shall be fitted with taps and a drain.

Lights shall be of the fluorescent type either double 40-watt, single 80-watt or of the incandescent type according to what is required and approved by the Engineer.

Each office shall have a telephone provided. Each office shall have at least four-15

metre lines connected to the office with a dedicate internet broad band connection and a telephone line. Installation of V-sat and payment of connection and servicing rights must be included as specified in the Indicative Bill of Quantities in subsection P1 1400-01.

PVC blinds shall be provided for each window.

All office and residential accommodation equipment shall be provided brand new and maintained at all times in a clean and working conditions to the Engineer's approval.

Sign boards shall be placed at the entrance of the camp and in other locations approved by the Engineer. The camp at the entrance and inside for carports shall be provided which are constructed so as to protect vehicles parked in them at all times against the

Juba - Malakal Road - Package 1: (km 0+000 to km 55+000)
Southern SudanSection 1
Technical Specifications

direct rays of the sun and rain. The carports shall be at least of 20m² in area and the floors shall consist of a layer of broken stone to alleviate dusty and muddy conditions. Each carport shall be at least 3m wide and shall have a head-room of at least 2m. The roofs of all carports shall be waterproof.

(b) Air Conditioning Units

The Contractor shall provide and install, unless specified otherwise, air-conditioning units to offices. The air-conditioning units shall be of the electrically operated compressor type with closed circuit and not of the evaporation type. The capacity of the air-conditioning units shall be at least 2.2 KW each.

(c) Offices

The Engineer's Offices shall be contained in a single building unit and shall consist of separate accommodation within the building.

The furniture to be provided shall conform to the requirements listed in Table 1401/1 and shall be approved by the Engineer.

The various sizes of offices required, unless otherwise specified, shall be as shown in Table 1401/2, and schedules of supplies and equipment to be provided as listed in Table 1401/3.

Table 1401/1 - Office Furniture

Item	Description	Quantity
1	Desks shall have six drawers and shall have a surface area of at least 1.5 sq. m. and shall be provided with 2 lockable drawers, with 2 keys per lock. This item includes executive chairs (one each).	2
2	Desks shall have three drawers and shall have a surface area of at least 1.2 sq. m. and shall be provided with at least 1 lockable drawer, with 2 keys. This item includes executive chairs (one each).	6
3	Steel general purpose cabinets shall have at least 1.5 sq.m. shelf area and a volume of 0.70 cum. Each cabinet shall have a lock with two keys.	2
4	Steel filing cabinets shall each be fitted with four drawers on runners. Each cabinet shall be fitted with a lock and two keys and shall be 1300 mm high, 460 mm wide and 600 mm from front to back.	3
5	Plan chests suitable for storing all the contract drawings.	1
6	Conference room shall have furniture as: Conference table (1.75 m x 0.9 m). Each table shall be square edged so that adjoining tables can form a conference table with six sturdy and comfortable chairs.	1
7	Black Board	1
8	Table for computer and printer	4

Table 1401/2 - Floor Area for Engineer's Office

Item	Description	Area (m ²)
1	Site Construction Leader (with toilet attached)	15
2	Materials Engineer (with toilet attached)	15
3	General Office	70
4	Secretary's Office	10
5	Conference Room	15

6	Severer, printers & scanner room	10
7	Kitchen Unit	10
8	Ablution Unit	5
9	(2 toilets -for men and women) + wash basin	10
10	Other Miscellaneous rooms as may be ordered by the Engineer	10

Table 1401/3 - Office Supplies and Equipment

Item	Description	No
1	Waste paper basket	12
2	Stapler	8
3	Paper punch	2
4	Heavy duty paper punch	2
5	Heavy duty stapler	2
6	Filing tray (set of 2)	8
7	Reading lamp	2
8	Digital Point and Shoot Camera	2
9	Clipboard	8
10	Electric water heater	3
11	Electric refrigerator, 300 litre capacity	7
12	Electric kettle	2
13	Electrical Coffee maker	2
14	Tea cups, teaspoons, knives, forks, plates	2 Sets for 6 pers.
15	Milk jug, sugar bowls, tea-pot	4 Sets
16	Cutlery and crockery (tea set etc) as directed by Engineer for the staff	15
17	Adequate supplies of all other office stationery	Upon request
18	Level book	12
19	Field book	12
20	Rain gauge	2
21	Thermometer (max/min)	2
22	Level (automatic)	2
23	Levelling Staff (5 m)	2
24	Ranging Rod (2 m)	2
25	Optical Square	2
26	Steel Tape (100 m)	2
27	Linea Tape (30 m)	4
28	Steel Pocket Tape	2
29	Hammer (5 Kg)	2
30	Survey Umbrella	2

All the office provided equipment will remain the property of the Contractor after

The access and other roads around the offices shall be provided by the Contractor. He shall keep them free of mud and dust either by using crushed stone, suitable dust laying oils, bituminous surfacing or other approved means. They shall be well-drained and kept trafficable at all times. Footpaths shall be similarly treated to provide convenient access to all buildings, between the car park and offices for the Engineer.

(e) *Communication System for the Engineer*

The Contractor will provide and effective internet system broad band/wireless with

Juba-Nimule Road - Package 1: (km 0+000 to km 55+000)
Southern SudanSection
Technical Specifications

fast and dedicated line in all both, office and in residential accommodations. The same shall be maintained operable during the 24 (twenty four) hours. The Contractor shall maintain the internet system, dismantling and removing it on the completion of the Contract. An equivalent replacement shall be provided if the internet system is out of service for more than 24 hours. Minimum characteristics of the internet equipment to be provided is as follows:

C-band VSAT kit for dedicated connectivity comprising of:

- a. 2.4m antenna, complete with 5w BUC and necessary equipments for a dedicated connection
- b. Bandwidth of 128k-upload/512k-download
- c. Should support up to 20 computers or user concurrently
- d. A cisco router for LAN connections
- e. Cisco wireless equipment for wireless connection

1403 SPECIFICATION (HOUSING ACCOMMODATION FOR THE ENGINEER)

(a) General

The Contractor shall provide, erect, furnish, equip and maintain for the duration of the Contract period, the following housing accommodation.

Houses and Motel Style accommodation for engineers: The Contractor shall provide One (01) Type "A" house; Two (02) Type "B" houses; and One (01) Motel style (with 10 double rooms) accommodation in accordance with the following:

- Type "A" houses - 3 bedrooms, lounge, dining area, a kitchen and toilet room (having a toilet bowl, a wash basin, bath or shower with solar water heater and a mirror). The built up area shall satisfy the minimum floor area indicated in Table 1401/4.
- Type B houses - 3 bedrooms, lounge, a kitchen and toilet room (having a toilet bowl, a wash basin, bath or shower with solar water heater and a mirror). The built up area shall satisfy the minimum floor area indicated in Table 1401/4.
- Motel style accommodation - 10 bedroom, lounge/study and bathroom, self-contained units in terraced arrangement attached to a common kitchen, dining and recreation room area. The built up area shall not be less than 150-sq. meter.

Table 1401/4 - Floor area for Housing Accommodation to the Engineers

Room Type	Minimum Floor Area (m ²)
Lounge	20
Dining Area	12
Kitchen	8
Bedroom (each)	15
Toilet and Bathroom	9

The total floor area for type "A" and type "B" houses shall not be less than 120 m² and

Technical Specification

85 m², and for the Motel Type 150m², unless otherwise specified.

(b) Description

The buildings shall be constructed with prefabricated material or porta-cabins or equivalent as agreed with the Engineer. The material to be used shall be strong, durable and of an acceptable quality.

The accommodation to be provided under this section shall be provided at a location to be approved by the Engineer within the compound of Contractor's camp in a separate area. The buildings shall be according to the standard, specified for the Engineer's offices and conforming to current building and architectural practice in Sudan for good quality buildings, and as approved by the Engineer.

- (i) Furnishings and equipment shall be as approved by the Engineer.
- (ii) The buildings shall be fully air-conditioned, unless specified otherwise. All areas except kitchen and bathrooms shall have ceiling fans.
- (iii) The equipment for the Engineer's houses shall also include, but not limited to the ones indicated in Table 1401/5, which shall be provided to the satisfaction of the Engineer.
- (iv) The facilities shall be fully wired and connected to a 220/250-volt AC power source, with at least two power points in each room and five points in the kitchen.
- (v) The living/dining room shall have air conditioning unit of at least 2 KW
- (vi) The furniture and equipment for the facilities are to be supplied will be brand new and after the completion of the contract all items shall become the property of the Contractor.
- (vii) There shall be a waterproof protection below concrete floors and waterproof layer at the same level within the walls. The quality and thickness of the waterproofing material to be used shall be subject to approval of the Engineer.
- (viii) All buildings/facilities shall have hot and cold running water and servants' and drivers' rooms.
- (ix) It is required a minimum of 10 (ten) rooms for drivers and servants with 3 (three) separate common bathrooms (two for males and one for females) provided each with toilet bowel, a wash basin, bath or shower with solar water heater and a mirror.
- (x) ~~Water supply shall be provided connected to the water main, an external elevated tank with a storage capacity of 5,000 liters shall be provided in order to maintain a head of 10 m. of water at the taps, together with the pipes and fittings required.~~
- (xi) The living quarters, at the contractor's option if are designed in order to be moved and re-erected on another site on completion of Works, shall be made of prefabricated materials of easy and fast erection or other approved material and shall have double walls fitted with insulating material. They shall be lined on the inside with timber or other approved material including ceilings.
- (xii) Floors shall be of concrete covered with suitable carpeting or vinyl tiles.
- (xiii) The living quarters shall have a clear height from floor to ceiling of 2.80 m as a minimum.

Juba-Nimule Road - Package 1: (km 0+000 to km 55+000)
Southern Sudan

Section
Technical Specifications

- (xiv) The total area of windows shall be at least 20% of the exterior wall area and all windows shall be of an approved type that open and close readily. All exterior doors and windows shall be provided with insect screens and the windows and doors shall be provided with suitable curtains or PVC blinds.
- (xv) Each facility after erection/construction shall be properly painted inside and outside with an approved paint and the paintwork shall be maintained during the Contract period.
- (xvi) All facilities shall be provided with adequate carports.
- (xvii) All the living areas shall be surrounded with their own compound wall or 2.5 m. high chain link security fence with a cranked top with three strands of barbed wire. The fence shall be provided with one gate to each facility.
- (xviii) Suitable gravel roads with a minimum width of 3.5 m shall be provided to connect all the facilities, as well as sufficient graveled parking area for the Engineer and visitors. Roads shall have adequate illumination with overhead lights. The entire Engineer's compound shall be fully illuminated and maintained at all times for security reasons.
- (xix) The Contractor shall provide day and night sufficient watchmen/gardener for each facility.
- (xx) Except where provided otherwise, the land and accommodation shall be available for the exclusive use of the Employer/ Engineer personnel for the period of the Contract to the end of the defects liability period.

Table 1401/5 - Equipment for the Engineer's Housing

Item	Description	No.
1	Refrigerator-freezer combination, 1.0 cu. m. minimum	1
2	Four plate stoves complete with grill, oven and splash plate	1
3	Built-in or separate wooden/steel wardrobes (app. Size 1980 mm x 915 mm x 485 mm) in the bedroom or metal wardrobes in the bedrooms	1
4	All the rooms of each house/apartment or motel type accommodation shall have one double size bed with mattresses and box springs, bed mosquito net, one table with chair, 165 litre refrigerator, air conditioning unit of at least 1.2 kW and one wardrobe/ cupboard	

(c) Maintenance

- (i) The Contractor shall arrange to maintain the residential accommodation until the issue of the Defects liability Certificate for the complete Works.
- (ii) Maintenance includes attending to repairs to various parts of the building, fittings etc. and the connecting services as and when necessary, including the annual interior and exterior paint work and periodic painting of wood and steel work; replacing the broken window/door, maintenance of internal roads and other repairs as directed by the Engineer.
- (iii) The Contractor shall arrange to provide uninterrupted supply of electricity and water for the facilities. In case of failure of main water or power supply, suitable arrangements shall be made for providing uninterrupted supply.
- (iv) The Contractor will provide brand new linen, toiletries and other accessories for

165, Nsoule Road - Package 1 (Ref. No. 155400)
Southern Sudan

Technical Specifications

both the accommodations (residential and office)

(v) The contractor will supply all the stationary (consumables) periodically or upon request of the Engineer.

All the costs of provision and maintenance of buildings with their fittings, office equipment, furniture, linen, towels, toiletries, stationary, etc. are included in the monthly unit rate of maintenance in the priced indicative Bill of Quantities.

1404 SERVICES

(a) Sanitary arrangements

The Contractor shall be responsible for the maintenance of all sanitary services necessary to keep bathrooms and latrines in a clean, neat and hygienic condition. Suitable sewerage arrangement is to be provided by the Contractor. The Contractor shall also provide for the removal of all rubbish in a daily basis. All the rubbish shall be disposed of in separate areas far away from the contractor's camp.

(b) Water, electricity and gas

- (i) The Contractor shall provide a supply of fresh clean potable water at a constant head of not less than 3 m at the taps.
- (ii) The Contractor shall provide the necessary electric power supply at 220/250 volts to the Engineer's residential accommodation and offices. The power available shall not be less than 10 KVA for the office.
- (iii) Electrical power and Water shall be supplied to the offices the 24 (twenty four) hours a day during all the construction period and during the Defects Liability Period.
- (iv) The Contractor shall where required also supply liquid petroleum gas, for any gas equipment supplied to the Engineer.
- (v) The Contractor shall provide and maintain at his own expense his own electrical supply. This supply must be adequate to supply the areas set aside for the housing of his staff and for his own and the Engineer's Office, and for any housing of the Engineer's staff.
- (vi) Once equipment becomes redundant and having received the approval from the Engineer the Contractor shall disconnect and remove said equipment and make good any works disturbed at his own expense.
- (vii) The Contractor shall maintain all equipment provided by him and shall always keep them in a serviceable condition and shall replace any item, which becomes unserviceable, defective or is lost.

The Contractor shall provide and maintain at his own expense three vehicles (as described below) and four (4) brand new motorcycles (125 cc with equipment and hard helmet each) for the sole use of the Engineer and his staff. All the vehicles must be comprehensively insured to cover any driver and passengers and damage to thirds. The vehicles shall be replaced by completing 100,000 km. Ownership of vehicles goes to the Contractor.

A description and the type of vehicles are given below under paragraph (b) of this Sub-Division. The Contractor shall provide as directed by the Engineer, experienced drivers with minimum English language skills, who shall be available to the Engineer at all times. The vehicles shall be provided with fuel and lubricants as required, and

Juba-Nimule Road - Package 1: (km 0+000 to km 55+000)
Southern Sudan

Section
Technical Specifications

shall be serviced, maintained and repaired so as to be in a reliable and roadworthy condition at all times.

The contractor shall replace any damaged vehicle or vehicle in workshops while repaired or maintained. The replacing vehicles shall be of equal or better characteristics of the one replaced.

(b) The following types of vehicles shall be supplied for the sole use of the Engineer.

- *Vehicle Type "A":* Hard-top Toyota type vehicle (2.8 liters minimum) or equivalent for 8 passengers, a-two sides 3-seat each in the rear, and two (driver and driver's companion front seats)
- *Motorcycles:* Brand name or equivalent 125cc equipped and hard helmets provided, without driver.

All vehicles shall be available to the Engineer within 120 days of the date of commencement of the works, or, in default, the Contractor shall provide temporary vehicles at his own cost. This is without prejudicing the Engineer's right to take other contractual actions. The Contractor shall be responsible for replacement whether temporary or permanent of any vehicle through repair or accident where such vehicle is unavailable to the Engineer for a period of more than 24 hours. However, the temporary cars must be of equal or superior quality in characteristic to the ones in the Indicative Bill of Quantities.

1407 MEASUREMENT AND PAYMENT

Providing and maintenance of Office and housing accommodation for the Engineer's staff; providing and maintenance of vehicles (with driver); and providing and maintenance of motorcycles (without driver); in accordance with provisions of this Division shall not be measured for payment but paid as lump sum per month.

Payment for all items covered under this Division will be paid as given below:

- (a) Providing and maintenance of Office and housing accommodation - Lump Sum per month
- (b) Providing and maintenance and operation of vehicles (with driver) - 3,000-Km-per month. (Prorate payments proceed as per actual monthly millage).
- (c) Providing and maintenance of motorcycles (without driver) - 3,000-Km-per month. (Prorate payments proceed as per actual monthly millage).

There will be no separate payment for any item which is included in the Specification (Division 1400 - Sub-Divisions 1401 to 1406). See Sub-Division 1103(b)."

DIVISION 1500 - TRAFFIC MANAGEMENT

Delete the text of Division 1500 in its entirety and replace with the following:

"Refer to General Conditions of Contract and Conditions of Particular Application with regards to Traffic Management procedures and requirements. No payment shall be made for Traffic Management. Traffic Management for the Works shall be a subsidiary obligation of the Contractor. See subdivision 1103(b)."

DIVISION 1600 - ENVIRONMENTAL PROTECTION AND MITIGATION MEASURES

Add the following new sub-division 1610 "Measurement and Payment"

1610 MEASUREMENT AND PAYMENT

Juba-Nimule Road - Package 12 (100-1000000000000000000)

Southern Sudan

Technical Specification

"Refer to General Conditions of Contract and Conditions of Particular Application with regards to Environmental Protection and Mitigation Measures requirements. No payment shall be made for Environmental Protection and Mitigation Measures. Environmental Protection and Mitigation Measures during the Works shall be a subsidiary obligation of the Contractor. See subdivision 1103(b)."

DIVISION 1700 - OVERHAUL

Under this Division 1700, delete the free-haul distance from the entire division specification and replace with "10 km".

Add the following two new Divisions 1800 - Mobilization and 1900 - Security Services

“DIVISION 1800 - MOBILIZATION

1801 DESCRIPTION

This work consists of moving personnel, equipment, material, and incidentals to the project and performing all work necessary before beginning work at the project site. Mobilization includes the obtaining of permits, insurances, and bonds.

Mobilization also includes submittal and approval of the Contractor's Program, complete construction of all temporary facilities, mobilization of all key personnel, equipment and plant to the Site, and submission and approval of the Contractor's Quality Control Plan, Environmental Management Plan, Safety and Security Plan, and Traffic Management Plan."

1802 MEASUREMENT AND PAYMENT

Mobilization in accordance with provisions of this Specification section shall not be measured for payment but paid as a lump sum.

Payment for mobilization shall be in accordance with the following:

- (b) 20% (twenty percent) upon consent by the Engineer of the Contractor's detailed Program.
- (c) 20% upon consent or approval by the Engineer of the Contractor Quality Control Plan, Safety and Security Plan, Environmental Management Plan, and Traffic Management Plan.
- (d) 30% upon complete construction of temporary facilities in accordance with the Contractor's plan in accordance with the layout plan submitted in compliance with requirements of the Contract.
- (e) 30% upon completion of mobilization of key personnel, equipment and plant to the Site.

For (c) and (d) above, those facilities, key personnel and equipment that, in accordance with the Contractors Program, are not required within the first 120 days after the Notice to Commence Work, shall not be paid.

Payment for mobilization in accordance with provisions of (c) and (d) above shall be based on a lump sum price which is 5% (five percent) of the original Contract Price amount minus the amounts of all provisional sums. Any portion of the mobilization lump sum price in excess of 5% (five percent) of the original Contract Price amount minus the amounts of all provisional sums shall be paid upon issuance of a Taking-Over Certificate in accordance with Clause 48 of the Contract Conditions.

a/b

DIVISION 1900 - SECURITY SERVICES

1901 SECURITY SUBCONTRACTOR

The Contractor shall engage the services of a Security Subcontractor as approved by the

SISP (USAID) Southern Sudan

Amendments to Technical Specifications Page 37 of 52

Juba-Nimule Road - Package 1: (km 0+000 to km 55+000)
 Southern Sudan

Section
 Technical Specifications

Employer to provide security at the work site including security at the Contractor's camp site and for equipment located on and off the Site. The security provided shall include the protection of Contractor's persons, equipment, completed Works, any travel or transportation of Contractor's personnel, materials or equipment to and from the Site or outside of the area of the Site. The Employer shall bear no financial responsibility for loss, damage, theft or destruction to property or persons regardless of cause.

The Contractor shall only subcontract Security Services operations to companies that are certified by the Government of Southern Sudan and employs qualified, experienced international supervisors. Firms that have Government of Southern Sudan certification include the following:

Sally port Global Holdings
 855 Boylston St. 2nd Floor
 Boston, MA. 02116, USA
 (617) 585-2503
tcharon@sallyportglobal.com

REED
 19440 Golf Vista Plaza
 Suite 230
 Leesburg, VA. 21076, USA
 (517) 209-5222
marius@reedinc.com

Armor Group
 25-28 Buckingham Gate
 London SW1E 6ID
 Tel. +44 (0) 20-7808-5800

1902 SECURITY SITUATION IN SOUTH SUDAN

After the deaths of 2.2 million Southern Sudanese over 20 years of civil war a peace treaty known as the Naivasha Treaty or the Comprehensive Peace Agreement (CPA) was signed on 09 January 2005. The treaty granted Southern Sudan certain autonomy from the North, followed by the independence of the Republic of South Sudan in 2011. It created a Vice-Presidential position in the South, a Vice-Presidential position for a representative from the South in the North, and a UN Mission in Sudan (UNMIS) to support implementation of the CPA.

The UN continues to perform functions relating to humanitarian assistance and protection and promotion of human rights. Among other requirements, the CPA called for redeployment and draw-down of military forces on both sides (particularly in the contentious border areas). Compliance with this requirement has been less than complete and the Sudan Peoples' Liberation Army (SPLA) and the Sudanese Armed Forces (SAF) remain ready to resume fighting in the event that there is a general breakdown in the CPA.

Throughout most parts of the South the threat to reconstruction and development projects is as follows:

- Indiscriminate attacks
- Hijacking of vehicles and equipment
- Criminal violence